

AGRICULTURAL OUTLOOK

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Commodity Overview

U.S. farm output to rebound: A return to normal weather in 1994 should set the stage for a more productive year for U.S. agriculture. With recovery from the flood and drought of 1993, crop production will likely increase 5 to 10 percent. Added to an expected record output of animal products, this would raise total farm production 5 percent from last year.

Higher prices for many commodities are expected, due to last year's smaller crop and reduced carryin. Larger output and higher crop prices will mean increased marketing revenue for farmers in 1994.

The strong growth in personal income combined with lower unemployment expected in the U.S. in 1994, will absorb much of the large meat supplies that are expected, supporting both grain and livestock prices. Stronger economic growth internationally will also support greater farm sales in 1994. The zero-to-negative real income growth achieved in 1993 by the developed countries is likely to be replaced by slow-to-moderate recoveries.

Agricultural Trade

U.S. ag exports steady: U.S. agricultural exports for fiscal 1994 are again pegged at about \$42.5 billion. With imports also forecast unchanged from last year, an agricultural trade surplus of \$18 billion is again expected. Export volume, however, is expected to drop about 10 percent, mostly due to lower shipments of corn, wheat, and soybeans. The U.S. trade forecast for fiscal 1994 reflects:

- prospects for relatively weak economic growth in Europe and Japan;
- smaller U.S. grain and oilseed supplies;
- increased grain production by some competitors and importers; and
- uncertainties about exports to the former Soviet Union and China.



Rural Development

Outlook mixed for rural America:

Rural America can be seen as a diverse realm with four kinds of areas. In 1994, *natural resource-dependent areas* will experience continuing pressure over environmental concerns. *Scenic, recreational, and retirement areas* are likely to experience substantial growth and conflict. *Manufacturing-dependent areas*, although they include highly competitive individual firms, also include some that are not likely to prosper. *Persistent-poverty and low-density regions* will need attention from the Federal government and USDA. Some portions of rural America will likely experience traumatic change in 1994. Possible candidates:

Articles are based on remarks by non-USDA as well as USDA authors. The contents present a diversity of viewpoints and do not necessarily reflect the views of the Department of Agriculture.

tourist areas dependent on uncertain energy prices, and the upper Midwest, if residual soil-moisture levels cause problems. In a political environment increasingly dominated by suburban voters and their representatives, USDA and rural leaders will need to create new alliances to address the needs of rural America.

Environment & Resources

Shifting to ecosystem management:

USDA's Forest Service and Soil Conservation Service are in transition to a new pattern of managing natural resources. The new approach, called ecosystem management, will involve a gradual shift in USDA management practices. *Ecosystems*—biological communities and their interactions with the environment—can be as large as the Mississippi River watershed or as small as an Iowa cornfield. Under ecosystem management, site-specific approaches to resource management and conservation are being expanded to include a systems approach focusing on the broader landscape over time. Ecosystem management calls for involvement of all concerned individuals and groups to address environmental problems shared in common. On private lands, ecosystem management activities will be consistent with landowners' objectives.

Rural Health Care

Health care reform and rural areas:

The Administration's proposal for health care reform—the Health Security Act—designed to secure and provide better health care for all Americans, will benefit farmers and rural communities particularly. The universal provisions—guaranteed coverage and access to services—are expected to greatly improve health care in rural communities, where more residents lack services and are uninsured and underinsured than in urban areas. The plan also includes a number of specific provisions designed to meet the needs of rural areas—including grants, tax credits, and other incentives for physicians to locate there.

Agricultural Economy



U.S. Agriculture: New Priorities

Mike Espy
Secretary of Agriculture

The year that ended with Congressional approval of the North American Free Trade Agreement and multilateral acceptance of the historic GATT accord was a year of almost nonstop events and initiatives of major significance to U.S. agriculture. Trade initiatives—a key strategy in promoting growth in U.S. farm income—occupied the spotlight for much of 1993. But other activities—in the headlines or quietly behind the scenes—were helping to set agricultural priorities for the coming decade.

The Year Behind, The Plans Ahead

Early in 1993—and early in the new Administration—USDA was confronted with an outbreak of *E. coli* in fast-food restaurants causing illness and even

death among patrons who consumed hamburgers containing the bacteria. USDA moved to begin overhauling its entire food inspection system, shifting from reliance on sight, touch, and smell, to state-of-the-art tools of microbiology to detect pathogens. Under the new system, USDA inspectors will focus on conditions at each link in the meat production chain, and the efforts will include consumer education.

The education of consumers became a USDA priority in the area of nutrition as well. A highlight of this initiative is cooperating with local school officials to introduce more healthful foods into USDA's School Lunch Program, which feeds about 25 million schoolchildren each day. A more nutritious selection of foods will not only promote better health among the young participants today, but will also educate them on sound nutrition practices for a lifetime.

Still high on USDA's priority list are the efforts begun after the flood of 1993 that involve cleanup as well as attempts to prevent a replay of the devastating losses. USDA's Soil Conservation Service has been working with the Army Corps of Engineers, the Federal Emergency Management Agency, and others to actually move towns out of the flood plain if residents wish to move. The post-flood tasks include repairing levees and cleaning up the mountains of silt and sand deposited by the Mississippi River.

USDA is intent on taking advantage of innovative programs within its current arsenal to arrive at long-term solutions, including the purchase of farmland along the flood plain—land that has flooded 16 times in the last 20 years—and placing it in permanent reserve. The Soil Conservation Service is prepared to work with conservation groups around the country to make this initiative a success.

The proposal would benefit everyone involved. The Federal government could avoid outlays for rebuilding levees in the future. Local levee districts would no longer have to assess their constituents for a share of the cost. And farmers would receive a fair market value for their prime cropland while freeing themselves from the anxiety of flood threats.

Crop insurance reform is also in the works. USDA's goal is a program that allows greater farmer participation; that is actuarially sound and also practical for the farmer; that involves preventive planning; and that includes affordable catastrophic provisions.

USDA has been making plans to improve the delivery of food stamps by moving into Electronic Benefits Transfer, or EBT, substituting a system based on ATM cards for one based on vouchers and coupons. With the EBT system, food stamp recipients can punch in their PIN numbers at the local grocery store and use the card to draw on individual accounts that have been created for them.

Farm Income & Export Growth

A central priority of USDA is to make the best use of its programs and activities to improve the income potential of U.S. farmers. But the reality is that Federal budget outlays for agriculture will continue to decline—a reality reflected in recent budget legislation and in the market orientation of the 1985 and 1990 Farm Acts. For this reason, U.S. farmers have a larger stake now in the outcome of the trade liberalization talks under GATT than in 1986 when the Uruguay Round of GATT talks began.

In 1986, farmers' net cash income was about \$48 billion, government outlays were a record \$26 billion, and farm exports stood at \$26 billion. Contrast this with the situation 6 years later, with net cash income at nearly \$57 billion, Federal outlays down to \$10 billion, and farm exports over \$42 billion. Moreover, the U.S. economy simply cannot grow rapidly enough to absorb the output from the steady rise in farm productivity. The expansion of export markets is critical to U.S. agriculture.

History also bears out the importance of export growth. During the 1950's, U.S. farm exports stagnated, crop surpluses mushroomed, and Congress implemented Public Law 480 and other mechanisms to boost U.S. exports. When agricultural

exports soared during the 1970's—from \$7 billion in 1970 to about \$41 billion by 1980—farm income grew rapidly.

In the 1980's, the inability to sustain the export growth of the previous decade led to financial stress in the farm sector. If the 1980's had seen half the export growth of the 1970's, annual farm income would have been far higher.

Trade expansion will not solve every economic problem confronting U.S. agriculture, nor is it the only outlet that will accommodate increased farm productivity. The exploration of industrial uses of crops, and the production of new crops for new uses, are examples of other outlets. Nevertheless, exports currently account for about 20 percent of farm output, and one out of every three acres of cropland. A primary policy goal is to position U.S. agriculture to take advantage of the opportunities that are expanding in the global export market.

In China, Hong Kong, Japan, and other Pacific Rim countries, for example, millions of consumers are earning higher incomes and diversifying their diets, presenting an opportunity for the U.S. to

expand exports of both bulk products and value-added items to the region. The U.S. message to all of these trading partners is the same: reduce tariffs, eliminate nontariff barriers, and eliminate regulations designed to keep out imports.

Center Stage: NAFTA & GATT

Passage of the North American Free Trade Agreement (NAFTA) by the U.S. Congress at the end of 1993 will expand U.S. agricultural exports to the growing Mexican market, boosting farm income. As trade barriers between the U.S. and Mexico are phased out, U.S. farm exports will continue to increase. After full implementation of NAFTA, annual U.S. agricultural exports are projected \$2.6 billion higher than without a NAFTA. An Administration goal is to extend free trade beyond Canada and Mexico to encompass the countries in the southern part of the Western Hemisphere.

With the GATT accord, which will reduce trade tariffs and eliminate numerous other trade barriers around the globe, the stakes are even higher for U.S. farmers,

for several reasons. One is the sheer size of the market spanned by the agreement, which covers 117 nations. The other is the significance and workability of a multilateral trade agreement that reduces trade barriers on a global basis.

Since it was chartered in 1948, the General Agreement on Tariffs and Trade has governed most international trade. When GATT negotiators met the December 15, 1993 deadline for arriving at an agreement, they capped 7 years of bargaining under the Uruguay Round, the eighth round of talks during GATT's history. In the Uruguay Round, agricultural trade was included for the first time since GATT was formed. And agriculture was among the most complex and, at times, contentious issues in the negotiations, necessitating a side agreement—the Blair House Agreement—between the U.S. and the European Community (EC) on farm export subsidies and internal supports, before a GATT accord could be concluded.

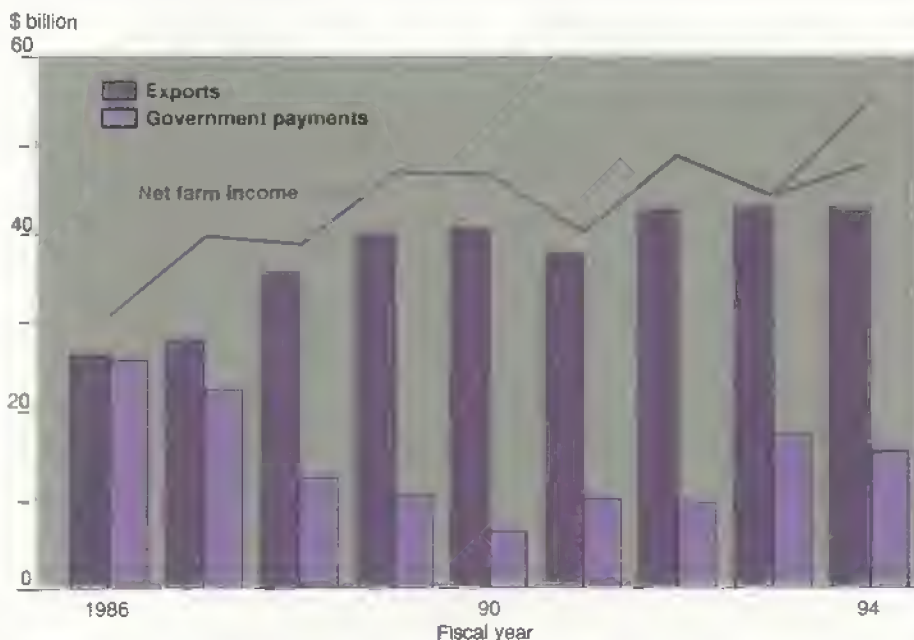
Export subsidies, especially in the EC, have retarded U.S. trade and reduced farm income over the past decade. The EC's high domestic prices have been protected by variable levies on imports that spur domestic production, and the resulting surpluses have been dumped on world markets, using the export subsidies. As a result, the EC has transformed itself from a net importer to a net exporter of many commodities, including grain, beef, and dairy products.

In the 11th hour of the GATT talks, the U.S. and the EC were able to agree on limiting subsidized grain exports and other farm subsidies.

Making the Case for Trade Liberalization

Among GATT's bonuses is its effect on potential trade with developing nations. As economies develop and industrialize, they often become more protective of their agriculture sectors. The Uruguay Round agreement would limit these countries' ability to choose a protectionist path of closed markets, internal supports, and subsidized exports. The U.S.

Farm Exports Steady, As Farm Income Forecast To Climb in 1994



1993 estimate. 1994 forecast range.

Agricultural Economy

currently sells well over 40 percent of its farm exports to developing countries, which have a powerful market potential as their populations and economies grow.

The drastic reduction of Japan's 1993 rice crop following a typhoon is an illustration of the global benefits of liberalized trade. Japan has kept a tight lock on its rice market, keeping out imports and exerting a policy of self-sufficiency in rice production. The typhoon helped loosen the lock. The U.S. has already shipped some rice to Japan, more will be exported this year, and Japan has announced it will partially open its rice market to imports.

Finely calculated national policies like self-sufficiency and food security can never be absolutely guaranteed. Nature and other unforeseen circumstances can upset the best laid plans. The only effective way to assure real food security is to open world markets, drop trade barriers, and allow those who need the products to take advantage of what is available. This is what liberalized trade is about—it benefits everyone, buyers and sellers. And U.S. farmers, productive and efficient, not only have the ability to compete in a liberalized trade environment, but need open markets for their products in order to continue operating successfully. Promoting a liberalized trade environment for agriculture will remain a top USDA priority. **AO**

The next issue of *Agricultural Outlook* will appear in March. AO is not published in February.

The editorial staff wishes our readers a **HAPPY** and **PRODUCTIVE** NEW YEAR.

Commodity Overview



U.S. Farm Output To Rebound In 1994

A return to normal weather in 1994 should set the stage for a more productive year for U.S. agriculture. With recovery from the flood and drought of 1993, crop production will likely increase 5 to 10 percent. Added to an expected record output of animal products, this would raise total farm production 5 percent from last year.

Higher prices for many commodities are expected, due to last year's smaller crop and reduced carryin. Larger output and higher crop prices will mean increased marketing revenue for farmers in 1994. However, in the absence of adverse weather, government payments are likely to be lower. Farmers' production expenses will rise with expanded crop acreage and higher prices for some inputs, including feed.

Global Demand To Rise in 1994

Global demand for agricultural commodities will be stronger in 1994 than last year, as real economic growth doubles to about 2.5 percent. Population will continue to expand by about 1.7 percent a year, fueling demand for food products. Growth in demand in 1994 will be especially strong in Asia and parts of Latin America. Domestic U.S. demand is forecast up in 1994 due to expectations of stronger U.S. economic growth.

Net cash income, which measures total income received in a year regardless of when the marketed output was produced, is forecast at \$55-\$62 billion in 1994, with the midpoint about matching the \$59 billion estimated for 1993. Net farm income, which measures the value of net income from the current year's production, is projected at \$47-\$54 billion in 1994, with the midpoint 15 percent above the estimate of \$44 billion for 1993.

Accounting for the higher expected net farm income are expanded crop production and an increase in the value of inventories. Because net farm income adjusts for beginning and ending inventories, changes in inventories have a major impact in computing net farm income.

Retail food prices are expected to rise a modest 2 to 4 percent in 1994, following an estimated 2-percent increase in 1993. Larger food production in 1994, coupled with a moderate rise in food marketing costs, will hold down increases in food prices.

U.S. Grain Output Expected To Recover

Assuming favorable weather, U.S. wheat plantings in 1994 are likely to be near last year's level. Factoring in trend yields, production should be higher. However, some winter wheat producers have already had planting difficulties because of late corn and soybean harvests and unfavorable weather.

Foreign wheat production in 1994/95 will be influenced by a number of economic, political, and policy developments, but as usual, will depend largely on weather. Planting reports point to a drop in winter wheat area in the former Soviet Union (FSU), and much of the region just suffered through one of the coldest Novembers on record. But conditions to date have been favorable in China, and a rebound in wheat production is expected in North Africa.

A major uncertainty is how producers in the European Community (EC) will respond to reduced support prices and required idling of cropland. Relative yields in EC countries seem to favor planting wheat over other crops. Strong prices for high-quality wheat will likely also lead to large plantings in Canada and Australia. Wheat supplies of these exporters will likely remain relatively larger in 1994/95 even with a drop in carryin stock.

With normal weather, global rice production could expand in 1994. World prices are expected to remain higher than last year as import demand, particularly from Japan, continues to be strong and export supplies remain relatively tight.

World rice trade in calendar 1994 is forecast to rise 10 percent from last year to around 15.4 million metric tons. The U.S. share of the world market is expected to rise slightly to 18.2 percent in calendar 1994, compared with 17.9 percent in 1993.

U.S. corn production in 1994 will be larger than last year, assuming trend yields, reduced area idled under government set-aside programs, and prices well above a year earlier at planting time. As with wheat, production in the FSU will have a large impact on total foreign coarse grain production.

Also like wheat, another major uncertainty is EC producers' response to reduced support prices and required idling of cropland. Historical data indicate that coarse grains, especially barley, are at a disadvantage in competing for area with other crops in the EC. In Eastern Europe, normal weather is expected to lead to a rebound.

Global Oilseed Crop To Be Record

Global oilseed supplies in 1994/95 will likely be at record levels in the absence of any serious weather problems in major producing countries. The U.S. will account for most of this gain, assuming more normal crop yields and a slight expansion in area. Higher prices for soybeans at planting will encourage more U.S. soybean area.

Although foreign oilseed supplies may show a small gain in 1994/95, U.S. soybean and soybean meal exports may show only a small recovery from 1993's lower levels. This is because weaker demand for protein feeds will likely persist, particularly in Europe and the FSU. Growth in emerging markets such as Mexico will account for much of the limited gains in U.S. exports.

Domestic U.S. soybean meal use should show a modest rise, helping soybean crush to recover from 1993's low. However, crush will remain below the record 1,279 million bushels of 1992/93.

With the rise in use trailing the increase in total supplies, U.S. soybean ending stocks should rise to 250-280 million bushels in 1994/95. Season-average soybean farm prices in 1994/95 are expected to decline and to be near or slightly above those in 1992/93.

The world protein meal outlook is dominated by events in the EC, Eastern Europe, and the FSU. These regions together account for about 40 percent of foreign protein use and an even larger share of world trade.

Continuing financial and credit problems, along with declining livestock herds, are hurting demand in Eastern Europe and the FSU, while the implementation of CAP reform policies in the EC is leading to a substantial drop in grain prices relative to protein feeds, encouraging substitution of grains for protein meals. While protein meal demand is also stagnant in some other industrial

markets, like Japan, rapid growth in 1993/94 is forecast for several countries in Latin America, Southeast Asia, and North Africa.

U.S. Cotton Output To Remain Unchanged

An early look at 1994/95 indicates that cotton production slightly above the current level would balance anticipated use and achieve the 30-percent stocks-to-use ratio targeted in the current Farm Act. To encourage this level of production, a preliminary 17.5-percent acreage reduction program (ARP) for upland cotton was announced November 1. A final ARP decision was expected by the end of December, taking into account any changes in supply and demand which have occurred since October.

U.S. cotton exports may increase in 1994/95, but growth will be tempered by static world trade and continuing strong foreign competition. Although global use is expected to be a record in 1994/95, most of the increase will likely occur in major producing countries, continuing the trend of recent years and limiting import growth.

World cotton trade may grow only 1-2 percent in 1994/95, to 27 million bales. Assuming the U.S. export share falls within the 20-25-percent range seen in the past three seasons, U.S. exports could total 5.5-7 million bales, compared with 5.9 million in 1993/94.

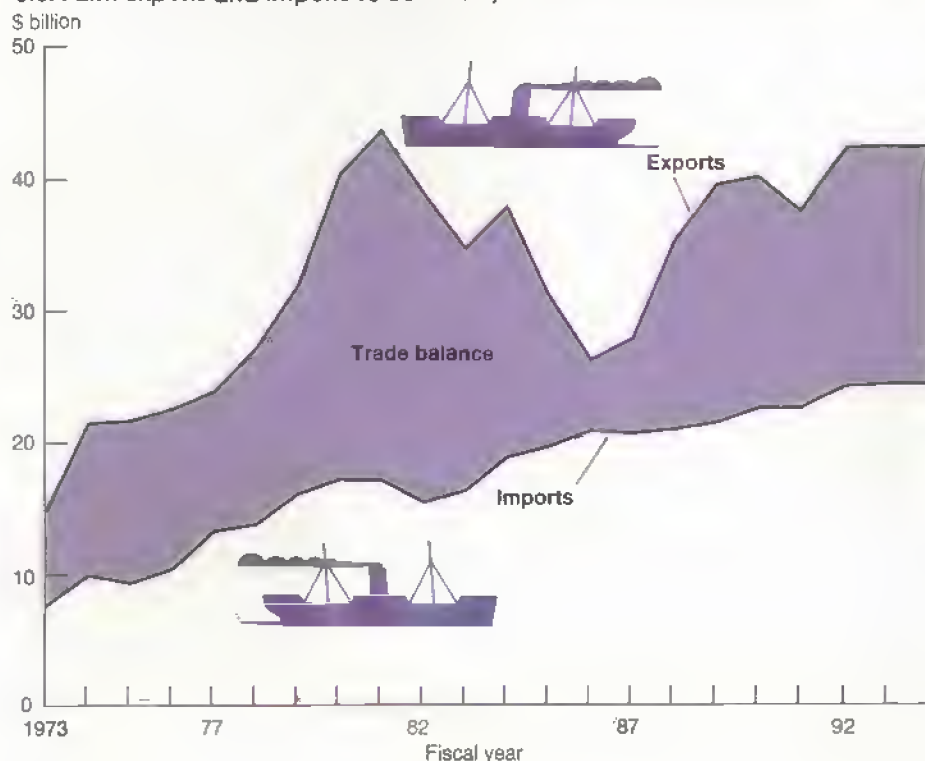
Broilers Lead Animal Products Expansion

World animal product output likely will increase a little over 2 percent in 1994, following a 1.5-percent expansion last year and 1.7 percent in 1992. Poultry meat production will lead the expansion. World poultry output is projected to increase nearly 4 percent in 1994, about the same as a year earlier but below the 6-percent rise in 1992.

Red meat production will be up 1 to 2 percent in 1994, following a rise last year of nearly 1 percent. Pork output is expected to expand 2 to 3 percent in 1994,

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U.S. Farm Exports and Imports To Be Steady In 1994



1994 forecast

while beef production will hold near the estimated 1993 level of 45.8 million metric tons.

Total U.S. meat production in 1994 will increase around 3 percent from 1993's record-large output. Broilers will continue a longrun upward trend, while pork slips a little and beef output increases.

U.S. producers are holding more replacement heifers than a year ago, and a modest expansion in the cattle inventory continues to be underway. The cattle inventory of January 1, 1994 is expected to be up 1 percent from a year earlier.

Inventories of cattle on feed remained sharply above a year earlier during 1993, despite placements that have been near 1992's level. The pace of marketings has been slow. Feeder cattle supplies should be large enough to support increased placements in the coming months. This should support larger fed cattle marketings into 1994. Cow slaughter in 1994 likely will be little changed from the 1993 level of 6.1 million head.

In recent months, slaughter weights have recovered from weather-induced stress levels of early 1993 and are now near record-high levels. Average weights in the first half of 1994 are expected to be up from the low levels of a year earlier. For all of 1994, average weights are expected to be higher, and beef production likely will rise 3-4 percent from a year ago.

Pork production in the U.S. is expected to remain below a year earlier through mid-1994. Output in the second half of 1994 is expected to rise, but a small decrease is forecast for all of 1994. Hog prices in 1994 are forecast to average near the 1993 level which should cover cash expenses for most producers.

U.S. poultry meat production continues its upward trend. Broiler production increases of 5 percent are expected for 1994 as in 1993. Despite increased production, broiler prices have been higher than a year earlier. Strong export demand has helped support broiler prices, and continued strong exports in 1994 are again expected to buttress prices. The 12-

city broiler price, estimated to average in the mid-50 cents per pound last year, is expected to be down only slightly in 1994. These prices point to continued positive returns for producers.

A small increase in U.S. turkey production is expected in 1994, the result of prices about 4 percent above a year earlier in 1993. Turkey hen prices in fourth-quarter 1993 were the highest since 1989. Contributing to the higher prices were strong exports.

Egg production will increase about 1 percent in 1994, about the same as a year ago, and prices are expected to decline. Egg producers achieved favorable returns in 1993 and held the flock size above a year earlier.


U.S. Ag Exports Remain Steady

U.S. agricultural exports in fiscal 1994 are forecast to match last year's—slightly above fiscal 1992's \$42.3 billion, but still below 1981's record \$43.8 billion. Lower export volumes for wheat, feed grains, and oilseeds will be partially offset by higher export prices, particularly for corn and soybeans. Rice and cotton exports will rise in volume and value. High-value product sales will increase again, aided by rising global demand, falling trade barriers, tariff reductions in a number of countries, and U.S. export promotion activities. While the dollar is expected to strengthen somewhat in 1994, it will not increase enough to significantly dampen U.S. competitiveness in this growing market.

Japan will continue to be the top market (nearly \$9 billion) for U.S. agricultural exports in FY '94, with beef, feed grains, and rice leading the increase. The EC and Canada are the second and third leading markets for U.S. agricultural exports, and Mexico is firmly in fourth place. Exports to Mexico are projected to be a record \$3.9 billion in fiscal 1994, up 5 percent from last year.

U.S. agricultural imports as well as exports for fiscal 1994 are forecast to match last year's. Tobacco imports will be down, but U.S. imports of most other

products will be the same or slightly higher. The value of U.S. imports of cocoa and coffee is likely to show a modest gain due to slightly stronger prices.

[James Donald, Chair, World Agricultural Outlook Board, USDA (202) 720-6030] 

Agriculture In 1994: Backdrop & Outlook

An unusual combination of fairly strong economic growth combined with low interest and inflation rates will have a favorable impact on U.S. agriculture in 1994. U.S. economic growth in 1994 is forecast to exceed 3 percent, the highest rate since 1988. A broad array of indicators is currently pointing toward strong real growth in fourth-quarter 1993, which is expected to carry into 1994.

This expansion is and will continue to be fueled by greater consumer and investment spending, which is overcoming stagnant net exports and smaller increases in government expenditures. Strong growth in personal income and lower unemployment typically support food and fiber demand. These two factors will be particularly helpful in absorbing the large meat supplies expected in 1994, supporting both grain and livestock prices.

Interest rates remain near 30-year lows, and inflation is modest and stable, helping to slow growth in farm production expenses for several years. However, while inflation is forecast to remain near the current 3 percent in 1994, increased demand for credit in 1994 should push interest rates up. Short-term rates are expected to rise about 1 percentage point by the end of 1994, adding \$0.5-\$1 billion to farm interest expenses.

To a lesser extent, economic growth internationally will also support greater farm sales in 1994. The zero-to-negative real income growth achieved in 1993 among the developed countries is likely to be replaced by slow-to-moderate recoveries. And although the nations of the former Soviet Union and Eastern Europe face another year of negative economic growth, the drop will be less than in 1993.

Some Farms Still Vulnerable

The financial status of U.S. agriculture, as well as domestic and global income growth, help form the backdrop for evaluating the economic health of the farm sector in 1994. Financial surveys of farms following 1992's record harvest indicated a gradual and steady improvement in the financial condition of the farm sector since the mid-1980's. Much of this improvement occurred prior to 1990, and the improvements since have been much smaller.

Even so, as U.S. farmers approached the 1993 growing season, record-high cash receipts in 1992 and 1993, high livestock prices, low interest rates, several new export promotion packages, and an improving global economy presented a picture of an agricultural economy continuing a slow but steady path toward financial improvement.

What followed in the summer of 1993 radically changed the farm outlook, with heavy rains and the worst flooding in over 100 years. The index of crop production in 1993 dropped 13 percent from a year earlier. And because the drop in production was concentrated in the flood areas, the losses have drawn attention to the financial status of Midwest farms.

The flood losses could affect a large number of farms simultaneously, making this a national concern. Entering 1993, about 15 percent of commercial-size farms (\$40,000 or more in annual sales) in the nine flood-affected Midwest states were either highly leveraged (debt-to-asset ratios above 40 percent) and thus very susceptible to income losses, or were highly leveraged as well as reporting negative net farm income.

Many of the farms that make up the 15 percent of Midwest commercial-size farms in difficult financial condition have been in this condition for several years. An additional 20 percent of Midwest farms had income losses in 1992, but had relatively low debt levels.

Flood Cuts 1993 Crop Drastically

In November 1993, the corn crop was estimated down 3 billion bushels from the year before, and the soybean crop down more than 350 million bushels. The rains and flood of 1993 plunged expected corn carryover stocks to the lowest level since the 1975/76 season, and soybean stocks to the lowest since 1977/78.

Reduced corn supplies, lower quality, and higher prices are expected to reduce feed use by 8 percent and exports by 19 percent in 1993/94. In addition to smaller corn and soybean crops in 1993, production levels of wheat, rice, sorghum, barley, and oats are all down.

Prices have generally increased in response to 1993-crop reductions. Compared with a year earlier, cash corn prices are up about \$0.70 a bushel, soybeans up \$1.20 a bushel, and wheat prices are about the same as last year despite larger stocks.

After a period of relatively stable average annual corn and soybean prices since 1989, livestock producers now face much higher feed costs. The cushion provided by stocks and "bargain prices" derived from 1992's exceptional crop yields is now gone, replaced by tight stocks, lower grain quality, higher prices and, in some areas, poor-quality hay supplies.

Were it not for 1992's record feed grain yields, livestock producers would now be initiating heavy liquidations of their herds, leading to large increases in retail food prices in the latter half of 1994 and in 1995. Instead, most livestock producers appear to be riding out the feed price runup with little herd liquidation. They have instead faced shrinking profit margins.

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Larger Crops Forecast for 1994

A "zero" acreage reduction program (ARP) will be in effect for wheat, corn, sorghum, barley, and oats in 1994. This is the first time there have been simultaneous zero-level ARP's since they were authorized in the 1981 Farm Act for 1982 crops. The reduction to zero from a preliminary 5 percent was due to a 9-percent drop in the estimate for 1993 feed grain production between September and November. The smaller production and low stocks have made the feed-livestock economy highly vulnerable to bad weather in 1994.

Although the zero ARP will not restore all the lost feed grain production, it will help the feed-livestock economy in several ways. First, it will enable corn producers to plant an additional 3 million acres in 1994, which with normal weather would raise 1994 production about 225 million bushels, or about 3 percent, above output with a 5-percent ARP.

Second, the ARP change will raise corn sector income and economic activity generally. A smaller ARP may mean

slightly lower prices than otherwise, but the ability to plant and receive income and program benefits on more acres will offset any price effect. The ARP change is estimated to raise net income to corn producers over \$200 million in 1994. For a farm with a 250-acre corn base and a program yield of 105 bushels per acre, a reduction in ARP from 5 to 0 percent increases gross income by an estimated \$3,475 and net income by \$1,740.

Third, the reduction in the ARP will also benefit producers who are unable to plant because of this year's flooding in the Midwest. These producers will be able to enroll in the 0/85/92 program in 1994, placing program acres into conserving uses. Thus, producers enrolling in the 0/85/92 program who are unable to plant because of flooding will have their base acreage protected.

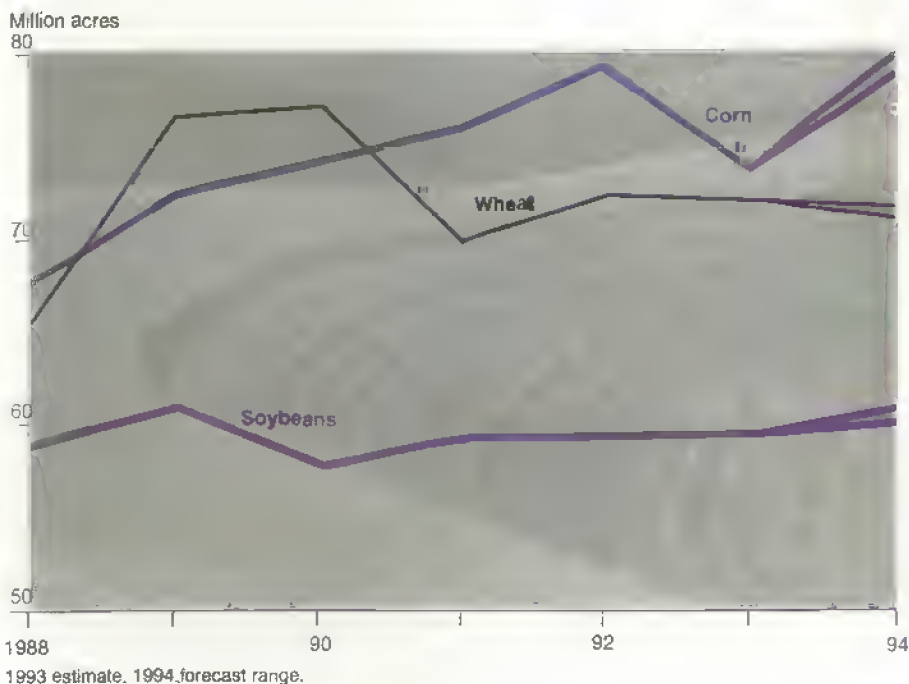
Acreage eligible for 0/92 payments will be 6 percent larger than with a 5-percent ARP. If a farm with a 250-acre corn base and a 105-bushel program yield is prevented from planting in 1994 because of the floods, reducing the ARP from 5 to 0 percent will increase 0/92 payments by \$2,150.

The overall tightening of commodity markets this season makes weather critical for 1994. Nearly 13 million acres of land was inundated in the nine flood-affected states. In addition, excessive rains soaked 40 million acres of highly erodible cropland, much of which suffered severe erosion. Land that can be reclaimed may not be usable until late in 1994 and in 1995. Once reclaimed, these lands cannot be expected to have a normal yield even with normal weather. In addition, not all levees will be repaired in time for spring planting, making affected land subject to flooding.

Taking into account the program changes and the weather effects, current estimates place 1994 corn plantings at 79-80 million acres, soybeans at 60-61 million, and wheat at 71-72 million. Corn acreage would be up about 6 million acres and soybeans up about 1 million compared with last year, while wheat plantings would be about the same as last year.

With normal yields, corn ending stocks would be 1.3-1.5 billion bushels by the end of 1994/95, wheat would remain at the level expected at the end of 1993/94, and soybeans would be 260-280 million bushels. These would be adequate, but not excessive, stocks.

Corn and Soybean Plantings To Increase

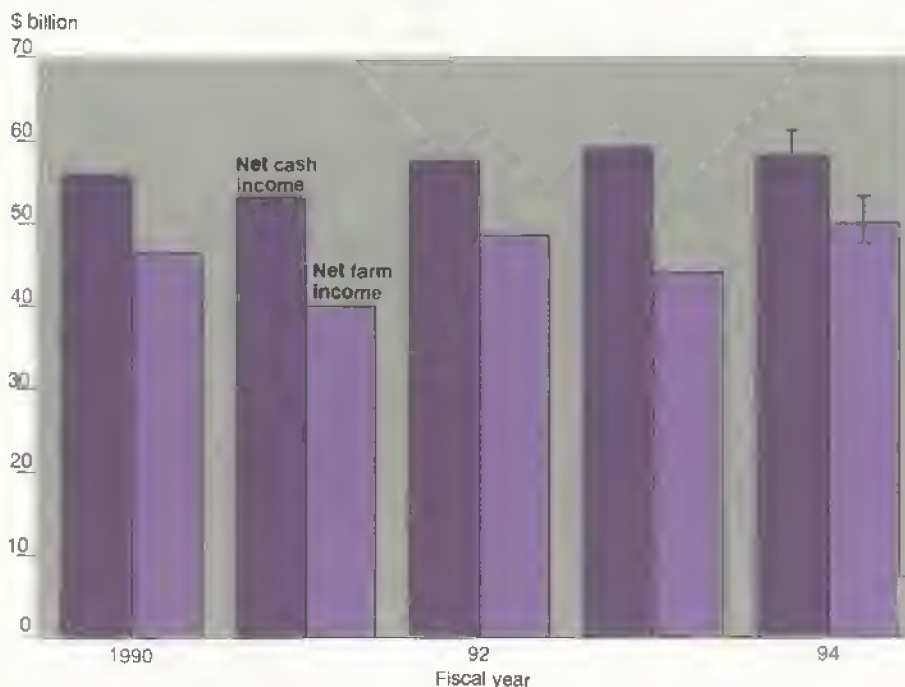


Production forecasts for 1994 upland cotton and rice depend on final program announcements that are yet to be made. The preliminary 1994 cotton ARP was set at 17.5 percent but is subject to change, and the November crop report suggests a lower final ARP. December's crop production report was the last information on the size of the 1993 cotton crop before the final decision due by January 1. Strong export demand and lower 1993 production have led to a zero ARP for rice.

Fourth-quarter 1993 beef production was expected to be up sharply from a year earlier, and production will remain higher during the first half of 1994. Pork output in 1993 was below a year earlier and, with higher feed costs, about the same production is expected in 1994. Poultry production is expected to be profitable

Commodity Overview

Net Farm Income To Rise In 1994



Net cash income measures total net income received in a year regardless of when the marketed output was produced. Net farm income measures the value of income from the current year's production. 1994 forecast range.

and up again in 1994. For 1994, increases in beef and poultry production are expected to result in a 3-percent rise in total meat production, compared with 1 percent last year.

Net Farm Income Expected Higher

Assuming a return to normal yields, farmers' aggregate net cash income in 1994 is likely to remain near last year's \$59 billion. Higher prices are expected to raise crop cash receipts, and large disaster payments made in 1994 will limit the drop in government payments. However, slight declines in livestock receipts and higher production expenses will prevent any increase in overall net cash income (gross cash income received by farmers in a calendar year, regardless of which year's output is sold, minus cash expenses incurred during the year).

In contrast, with normal yields in 1994, increases in the value of inventories could cause a sharp rise in net farm income—the amount earned from the year's output—from 1993's reduced

level. On a farm household level, income from farming could rise by several hundred dollars in 1993 and 1994 from 1992's U.S. average of \$4,337 per household.

However, aggregate net cash income and net farm income fail to provide an adequate picture for farmers affected by 1993's flooding and drought. For example, the value of major field crops in 1993 is down an estimated \$2.2 billion in Iowa, but up by \$340 million in Indiana. Lost production in 1993 will reduce cash receipts in flood-affected states in both 1993 and 1994.

The disaster legislation passed by Congress in 1993 will help to offset the financial effects on farmers of flooding and drought. Disaster payments for 1993-crop losses are expected to total nearly \$2.4 billion.

In addition to receiving disaster payments, farmers adversely affected by flooding and drought may have signed up for 0/92 payments, and some may have crop insurance. Most producers participating in the annual acreage reduction

program who elected to purchase crop insurance, and who can reclaim their land, should be able to recover from this year's flooding and drought.

Crop insurance, disaster, and 0/92 payments to a corn producer who participated in the corn program, has crop insurance, and did not harvest a crop in 1993, are estimated to cover about 90 percent of gross income that was expected before the floods hit. But the same producer without crop insurance will receive disaster and 0/92 payments totaling less than 50 percent of pre-flood gross income.

Finally, program nonparticipants without crop insurance will receive disaster payments equivalent to about 25 percent of the gross income they would have earned without the floods. This coverage, of course, is for 1993 crop losses and does not compensate at all for future losses due to long-term damage to land or loss of buildings and homes.

Food Prices To Rise Modestly

Retail food prices are expected to increase 2-4 percent in 1994. But during the first half of the year, record meat supplies could lead to lower retail beef and poultry prices. Retail egg and fresh vegetable prices could also be down in 1994. In addition, the relatively low rate of inflation in the general economy will tend to limit food price increases.

The primary effects of 1993's reduced grain supplies on retail food prices will not begin to show up until the second half of 1994. However, normal weather, coupled with moderate crop prices during the latter half of 1994, should give the signal to livestock producers to continue building their herds

The Consumer Price Index (CPI) for food is expected to increase about 2 percent in 1993, the third consecutive year in which food price inflation has been substantially less than the overall increase in the CPI. Thus far, the 1993 weather has had little impact on the food CPI. Most of the damage involved corn

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and soybeans, which are mostly inputs in meat and poultry production rather than final consumer products. Long production cycles for beef and pork tend to retard the transmission of feed price increases to consumers.

The food CPI for poultry has increased monthly since July, which is consistent with the shorter production cycle for poultry. These increases, however, will not have a noticeable impact on the overall CPI for food.

Issues To Watch: NAFTA, Ethanol, bST

The North American Free Trade Agreement (NAFTA), ethanol, and bST are policy issues that will affect the farm sector in 1994. With implementation of NAFTA, a number of agricultural commodities will enter Mexico duty-free immediately. Longrun gains will be ample, but immediate trade expansion is expected for beef, cattle, corn, and some fruits such as pears.

During the first three quarters of 1993, U.S. beef exports to Mexico were down 37 percent from a year earlier and cattle exports down 69 percent. The reductions were the result of tariff rates of 15 to 25 percent imposed by Mexico in 1992. These tariffs were eliminated immediately under NAFTA, and trade is expected to return quickly to pre-1993 levels.

Another commodity to enjoy an early effect is corn. Mexico's current import license program, which limits U.S. corn exports, is replaced by a 2.5-million-ton tariff rate quota (TRQ) in 1994 and a 2.6-million-ton TRQ in 1995. Mexico is expected to import the full 5.1 million tons over 1994 and 1995, more than double the amount expected without a NAFTA.

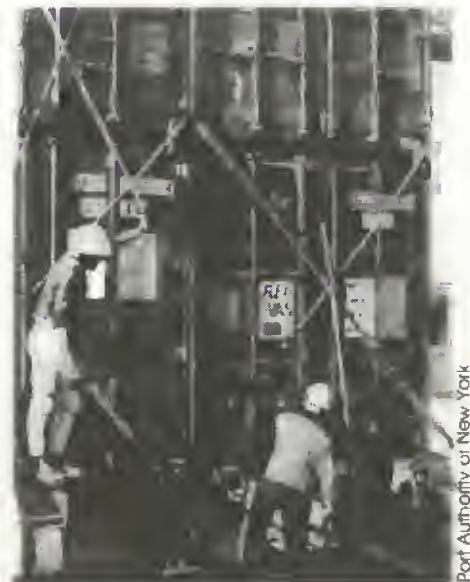
Implementation of the Clean Air Act amendments of 1990 and the Energy Policy Act of 1992 are expected to enhance the role of ethanol in the marketplace. Since the Oxygenated Fuels Program began in November 1992, ethanol has played a major role in reducing harmful carbon monoxide in such cities as Phoenix and Denver.

Demand for ethanol as a fuel oxygenate was a major reason over 1 billion gallons of ethanol was blended into gasoline in 1993, using 450 million bushels of corn. The Environmental Protection Agency's (EPA) proposed rule for the reformulated gasoline program is expected to give ethanol, and ethanol derivatives, an opportunity to compete in the reformulated gasoline market beginning in 1995.

The approval of recombinant bST, the hormone for increasing milk production in dairy cows, means that its use will begin in the first quarter of 1994. With FDA's finding that bST is safe for humans, animals, and the environment, USDA forecasts virtually no effect on total milk use. And little effect on milk production is foreseen. About 10 percent of the nation's milk cows are expected to be receiving bST by the end of 1994.

Finally, the longrun strength of the agricultural economy will depend on growth in the global economy, which is intimately linked to liberalized trade. Debate on the 1995 farm bill is approaching, with concerns over the budget, conservation, and environmental protection. Decisions about the Conservation Reserve, the Clean Water Act reauthorization, pesticides, food safety, and nutrition will affect the selection of foods that are produced, how they are produced, and how they are handled from farm to table. [Keith Collins, Acting Assistant Secretary for Economics, USDA] **AO**

World Agriculture & Trade



Port Authority of New York

U.S. Ag Exports Steady In FY '94

The first export forecasts for fiscal 1994 show virtually no change in overall value from last year, despite some significant changes for individual products and markets. Most longer term projections are more optimistic, for a number of reasons that include a new convergence of U.S. foreign policy and trade policy in the post-Cold War world.

U.S. agricultural exports for fiscal 1994 are again pegged at about \$42.5 billion. With imports also forecast unchanged from last year, an agricultural trade surplus of \$18 billion is again expected. Export volume, however, is expected to drop about 10 percent as shipments of corn, wheat, and soybeans decline.

The stagnant trade forecast for fiscal 1994 is due to relatively weak prospects for economic growth in Europe and Japan; smaller supplies of U.S. grains and oilseeds at generally higher prices; increased grain production by several important competitors and importers; and

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major uncertainties regarding exports to the former Soviet Union (FSU) and China.

On the positive side, U.S. export programs and some important trade and policy developments in key importing countries such as Japan and Mexico have kept 1994 forecast export value from dropping. In addition, the variety of products exported, as well as the diversity of markets served, help support 1994 exports.

U.S. Bulk Exports To Decline . . .

U.S. exports of most major bulk agricultural commodities are expected to be smaller in fiscal 1994 than in 1993. U.S. wheat and flour exports are expected to drop 17 percent in volume, and export value could be down nearly 20 percent due to lower average wheat prices. Behind these forecasts are reduced import demand in the former Soviet republics and south Asia, as well as another year of weak sales to China, which harvested a record wheat crop in 1993.

U.S. coarse grain exports, which are about 80 percent corn, are expected to drop 15 percent in volume. But sharply higher U.S. corn and sorghum prices, reflecting flood-reduced crops, will likely put the value of exports near 1993's \$5.3 billion.

The smaller coarse grain volume is due to relatively higher U.S. prices, increased competition, and larger harvests in southern Africa, Eastern Europe, and Canada. China is expected to achieve record corn exports, further displacing U.S. corn in South Korea and some other Pacific Rim markets.

U.S. oilseed exports are forecast to drop 4 million tons, or 15 percent, in fiscal 1994, although higher trading prices should hold value above \$7 billion. U.S. sales to the European Community (EC) will be down as grains are substituted for protein meals in EC feed rations due to ongoing cuts in grain prices there. The U.S. will also face increased competition from larger expected oilseed harvests in South America.

In contrast, cotton and rice exports will be higher in 1994. U.S. rice exports in calendar 1994 are forecast at 2.8 million metric tons valued at \$1.1 billion, up over \$300 million, or more than 40 percent from last year. For the first time in decades, Japan is buying rice from the U.S., accounting for most of the increase in U.S. rice exports and price.

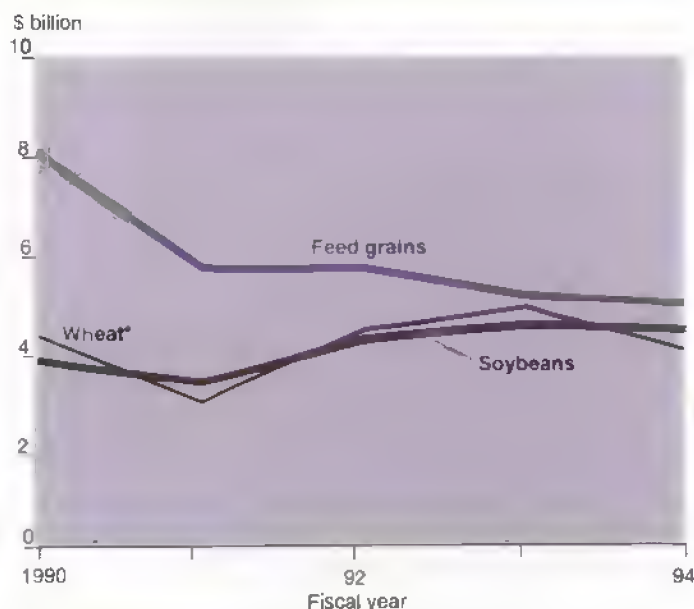
For U.S. cotton exports, modest increases in volume and value are forecast for fiscal 1994, boosted by larger U.S. supplies and increased import demand by some traditional exporters, such as Mexico.

. . . But High-Value Exports To Rise

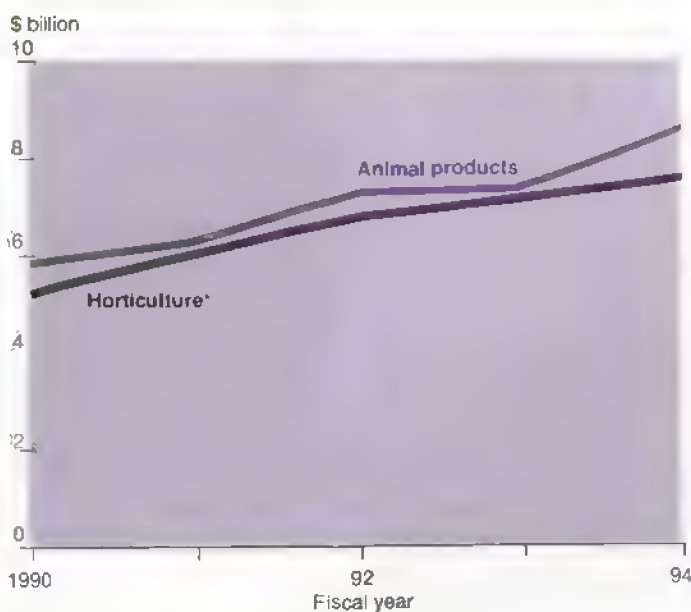
Unlike most bulk commodities, U.S. exports of high-value products are forecast up in fiscal 1994. Another record year is expected for U.S. livestock, dairy, and poultry product exports, with value forecast at \$8.5 billion.

Greater imports of beef, pork, and variety meats are forecast for Japan, South Korea, and Mexico, reflecting more open

While U.S. Exports of Bulk Products Decline . . .



. . . Record Exports of High-Value Products Are Forecast



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markets, rising incomes, and the shift in tastes to more meats in their diets. Sales of U.S. broiler parts to these countries are expanding rapidly.

A record year for U.S. horticultural products is also forecast for 1994, with sales expected to reach \$7.5 billion. Most of the expected increase, over \$300 million, is due to larger exports of fruits, vegetables, and juices to Canada, Japan, and the EC. Marketing activities have been particularly effective in capitalizing on the growing foreign demand for more fruits and vegetables as part of a move to more healthful diets in developed countries.

U.S. consumer-oriented exports, which include everything from snack foods to meats to fruits and vegetables, now amount to more than one-third of U.S. agricultural exports, up from 14 percent a decade ago. These value-added products set a seventh straight annual record in fiscal 1993 at close to \$15 billion.

Two other commodity sectors included in USDA's marketing efforts, and now reported with agricultural statistics, are contributing to record farm exports. Fish and wood products, if added to U.S. agricultural exports, propel the total for fiscal 1993 to \$52.7 billion. That's the highest combined total ever, boosted by the rapid growth in U.S. forest product exports as Pacific Rim markets experience a construction boom.

Asia Remains Largest Market for U.S.

Asia is the fastest growing economic region in the world and the largest regional market for U.S. agricultural exports—accounting for over \$16 billion or nearly 40 percent of U.S. exports in fiscal 1993. East Asia takes close to 90 percent of these exports.

Although certain countries in East Asia maintain some of the most persistent and challenging barriers to trade, this is also a region with the greatest potential as an export outlet through market-opening agreements. Due largely to successful trade policy, U.S. agricultural exports to Japan in fiscal 1994 are forecast to set another record at \$8.9 billion, despite

continued weakness in the Japanese economy. Gains are expected in rice, beef, and a wide range of high-value products. Elsewhere in East Asia, South Korea and Taiwan are each expected to purchase \$2 billion or more of U.S. agricultural exports over the coming year.

U.S. agricultural exports to China in fiscal 1994 are forecast at \$300 million, less than half the level of fiscal 1992. However, this forecast bears a high level of uncertainty because of the many economic reforms China has launched. Longer term prospects depend on improved market access and the resolution of a number of trade issues, as well as issues related to China's request for most-favored-nation status.

Nevertheless, China represents a potentially large and growing market for many U.S. agricultural products, including wheat, protein meals, and a wide variety of value-added products. U.S. exports have been especially strong in the southern coastal plains of China, where incomes are three times China's national average.

In fact, the rapid gains in U.S. agricultural exports to Hong Kong partly reflect products going into southern China. An estimated one-third of Hong Kong's imports are being re-exported to China. Of course, other countries see these opportunities as well.

NAFTA & Beyond

U.S. agricultural exports within the Western Hemisphere now exceed \$12 billion, led by Canada and Mexico, the second- and third-largest single-country markets for U.S. agricultural exports, after Japan.

Sales to Canada reached a record of more than \$5 billion in fiscal 1993, with consumer-oriented products dominating. Although Canada is a relatively mature market, further moderate export growth is expected, particularly for fresh fruits and value-added consumer-ready products.

But the strongest growth potential for U.S. agricultural exports in the Western Hemisphere lies in Mexico and South

America. Latin America is the second-fastest-growing region in the world, and market-oriented reforms are sweeping this hemisphere.

NAFTA, in effect beginning January 1, 1994, has significant implications for U.S. agricultural exports over the longer term. Mexico is forecast to import \$10 billion annually in U.S. agricultural products when the agreement is fully implemented over the next 15 years.

U.S. agricultural exports to Mexico dipped slightly in 1993 but are forecast to set a record of nearly \$4 billion in 1994. The two key expansion factors are stronger growth expected in the Mexican economy, and the PROCAMPO program for agricultural reform announced by President Salinas in October. PROCAMPO will accelerate the shift to free-market prices and decouple farm supports from production in Mexico's agriculture.

The U.S. will be seeking to negotiate free-trade agreements with other countries in the Western Hemisphere, either as part of NAFTA or as separate bilateral accords. Chile is the first prospective candidate.

GATT Is Critical To U.S.-EC Trade

The EC, a leading market for U.S. soybeans, tobacco, feeds, cotton, tree nuts, fruits and vegetables, and other products, will continue to be a significant customer for U.S. agriculture.

U.S. agricultural exports to the EC in fiscal 1994 are forecast to be \$7 billion, the same as 1993. Over the next few years, U.S. exports could benefit from an economic recovery in the EC and from reform of the Community's Common Agricultural Policy, which will likely reduce EC coarse grain exports and oilseed production and slow the growth in EC wheat production.

But the most important single contingency affecting U.S.-EC trade has been a successful conclusion of the Uruguay Round of the General Agreement on

Tariffs and Trade (GATT). The successful Round will curb export subsidies, discipline internal farm supports, encourage market-oriented reforms worldwide, provide clear rules for phytosanitary regulations, and provide a market access commitment without the need for bilateral negotiations.

Exports to FSU To Contract

U.S. agricultural exports to countries of the former Soviet Union are forecast to be \$1.2 billion in fiscal 1994, down more than \$350 million from 1993 and less than half 1992's value.

A great deal of uncertainty clouds the outlook for trade with these countries. U.S. export assistance programs will continue to play a major role in exports to the countries of the FSU.

Although Russia has been suspended from the GSM-102 export credit guarantee program for about a year, it is being reevaluated for creditworthiness. Russia was once an annual market for about 20 million tons of grain alone. That market is now shrinking but will remain significant. On the brighter side, Russia is now the fifth-largest foreign market for U.S. snack foods, and this market is growing.

Fiscal 1994 GSM-102 programs for Ukraine and Turkmenistan have already been announced. In addition, P.L. 480 Title I programs are in effect for several of the newly independent states.

Policy Role Is Pivotal

Since 1990, U.S. agricultural exports have been relatively stagnant—growing about 1.5 percent a year. Although most longer term projections are for stronger growth based on a likely economic recovery abroad, the outlook still falls far short of an open, dynamic, fast-growing export market capable of absorbing greater U.S. agricultural production.

U.S. agricultural trade could expand faster with elimination of a number of obstacles—self-sufficiency policies in food staples, government control of

markets, agricultural protectionism, and unfair trade practices. In fact, rising demand for farm products in fast-growing developing countries may not translate into greater trade unless markets are opened. This is why foreign policy will play a pivotal role in the U.S. export future.

If current pressures for market liberalization are institutionalized through a successful GATT and other agreements, developing countries will be dissuaded from providing farm subsidies and promoting trade-inhibiting protection of domestic producers. And in high-income countries, GATT will afford protection against restrictive new food laws inhibiting the import of consumer-oriented foods, the fastest growing category of U.S. exports. These are just a few of the benefits to be derived from GATT.

NAFTA was a first step in a long-term hemispheric vision of growing trade and strong economic growth. And the Asian Pacific Economic Community meeting in Seattle in November 1993 was just a beginning to an economic alliance with fast-growing Asian and other Pacific Rim countries. But the foundation of more open trade has been laid.

For the first time in many decades, U.S. foreign policy will be defined in large part by economic and trade priorities, not by Cold War objectives which at times put foreign policy at odds with free and open trade. As a result, agriculture may now face the most favorable policy climate for export growth in recent history.

In the new world order, agriculture everywhere will be affected by more factors, not fewer, and greater pressures to respond quickly to changing conditions. The pace of market liberalization, new production and processing technologies, the health and stability of the world economy, political relationships among nations, fiscal and environmental pressures in the U.S. and abroad, global humanitarian issues, food safety and quality concerns, and the growing voice and rapidly changing demands of consumers worldwide will influence the future of agricultural trade. This new environment plays to the historic strength and adaptability of U.S. agriculture.

Providing the opportunity to use these strengths is the task and the challenge of trade policy, and is critical to the growth and prosperity of U.S. agriculture.

[Eugene Moos, Under Secretary for International Affairs and Commodity Programs, USDA] AO

January Releases—USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

January

- 5 *Broiler Hatchery*
Dairy Products
Poultry Slaughter
- 10 *Egg Products*
- 12 *Broiler Hatchery*
Cotton Ginnings
Crop Production
Crop Production, Annual
Grain Stocks
Rice Stocks
Winter Wheat & Rye
Seedlings
- 13 *Turkey Hatchery*
- 14 *Milk Production*
Potato Stocks
Turkeys
- 18 *Vegetables*
Vegetables, Annual
- 19 *Broiler Hatchery*
- 20 *Noncitrus Fruits & Nuts,*
Preliminary
- 21 *Coffish Processing*
Cold Storage
Livestock Slaughter
- 25 *Cotton Ginnings*
Crop Values
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- 27 *Chickens & Eggs*
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Annual
- 28 *Cattle on Feed*
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Sheep & Lambs on Feed
- 31 *Agricultural Prices*
Capacity of Refrigerated
Warehouses

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Nutrition: Blending Policy & Programs

USDA Secretary Mike Espy has proposed reorganizing USDA around six central missions to reflect contemporary concerns and needs. USDA recognizes the need to go beyond its role in improving the production and distribution of food, and to establish nutrition education programs that promote healthful eating habits. So in the new USDA, nutrition is elevated to a priority mission.

Forging a Common Focus

For nearly half a century, USDA has woven an intricate network of programs to provide access to food. Programs such as the Food Stamp Program, WIC, School Lunch Program, and others have provided food to many needy people. Yet, despite the unquestionable value of these programs, they have lacked a common identity and focus. In the reorgan-

ized USDA, the food programs will become nutrition assistance programs, recognizing that nutrition is a basic ingredient of preventive health care.

Each school day, USDA provides meals to some 25 million children in 90,000 schools across the country. But a recent USDA study found the meals served to and eaten by schoolchildren exceed dietary guidelines for fat, saturated fat, and sodium.

Given the scientific evidence of the link between diet and health, it is essential to improve the nutritional quality of the school meals. The Department has a responsibility to concerned parents, taxpayers, and the millions of children who eat a school meal each day, to ensure that those meals conform to the Federal government's nutrition policy indicated in USDA's "Dietary Guidelines for Americans."

USDA recently completed a series of regional forums focusing on ways to improve the nutritional quality of the school meal programs. This issue touches everyone—in school and out. Parents, teachers, students, pediatricians, food-service workers, cardiologists, coaches, farmers, and chefs have testified at these forums.

USDA has already doubled the amount of fresh fruits and vegetables offered this year in the National School Lunch Program from last year's total distribution of 8.8 million pounds. And the Department has pilot programs underway to test the use of low-fat mozzarella and cheddar cheese in school lunches.

On another front, the Food Stamp Program provides an excellent opportunity to offer nutrition information and help recipients make food purchases based on sound nutrition. The Food Stamp Program is the nation's primary defense against hunger and the second-largest public assistance program. Today, food stamps help sustain the health and well-being of 27 million Americans every month.

While low-income populations are at greater risk of diet-related chronic disease, these communities and groups

often have not been reached with the nutrition message. But in one USDA food program—the WIC program—nutrition has been central from the beginning. In just two decades, the Special Supplemental Program for Women, Infants and Children (WIC) has grown from a pilot project operating in a few counties to a national program serving 6 million low-income women, infants, and children each month.

WIC has had such success in part because nutrition education has been built into the program. USDA intends to build on the WIC model to make nutrition education an integral part of all 14 food assistance programs.

New Media For the Message

To be fully successful, USDA's nutrition messages must be communicated more effectively. While Americans live in a technologically sophisticated world, USDA continues to disseminate information mainly by paper pamphlet. Therefore, USDA is planning a comprehensive, coordinated national campaign on nutrition education—one that uses more varied media and more creative techniques to produce persuasive and far-reaching communications.

- *Tapping the talents of audiovisual professionals.* Secretary Espy and Assistant Secretary Haas recently met with the president of Walt Disney Studios to discuss ways of reaching young people with nutrition information that is lively and entertaining.
- *Working with professional chefs.* Employees in the school lunchroom and students in the classroom can learn that nutritious food can also look good and taste good.
- *Providing video programs in food stamp offices.* While food stamp applicants wait in reception rooms to be assisted or interviewed, lively video programs can deliver an effective nutrition message.

- *Bringing producers into schools.* When the country was founded, Americans understood their connection to the land. Children knew where their food came from because they had watched it grow. For today's children, food comes from the frozen case at the supermarket or the drive-through window at the fast-food restaurant. It's time to reestablish the continuum from seed to supper.
- *Encouraging continued market response to consumers' call for more healthful products.* No one has been more creative than the groups representing agricultural commodities in responding to the call for more nutritious foods that are both appetizing and healthful. The meat and dairy industries, for example, have worked to provide and promote lower fat products.
- *Forging partnerships with state and local institutions.* All who are part of the food system—consumers, farmers, industry, and government—have a stake in improving the nutritional well-being of Americans.

USDA's current nutrition agenda is an agenda for change. Rather than a "silver bullet" approach, USDA plans a complete integration of nutrition into its food programs. Just as the "buckle-up" campaign has saved lives on the highways, we need to "buckle up" with a positive image of proper nutrition. The campaign must be comprehensive, consistent, and one that can be sustained over time.

Good nutrition is good preventive medicine. As Federal food assistance policies refocus on their nutritional mission, the gap between the dietary guidelines and their application in food programs will close. The health of our future depends upon the future of our health.

[Ellen Haas, Assistant Secretary for Food and Consumer Services, USDA. Under a reorganized USDA, the Assistant Secretary for Food and Consumer Services would become Under Secretary for Food, Nutrition, and Consumer Services.] AO

Strategies for Nutrition Policy

The two articles that follow examine the dietary guidelines that promote health, and outline some changes in food policies and new approaches to nutrition education that could help all Americans put the advice into practice.

Nutrients & Health: Making the Connection

The link between nutrition and agricultural policy was acknowledged from the moment in 1862 when USDA was established, with a mandate to promote agriculture as well as to provide information on subjects related to agriculture. By the late 1890's, USDA had published tables of food composition, estimates of nutrient requirements of individuals performing various levels of work, and dietary recommendations for disease prevention.

Since that time, USDA has continued to produce materials to educate the public about the nutritional value of foods, the role of specific foods in the diet, and patterns of dietary intake that best promote health. As long as this advice focused on prevention of nutrient deficiencies, and suggested eating more foods from various groups, no objections were raised.

The situation changed when dietary advice shifted from "eat more" to "eat less." Back in 1900, tuberculosis, pneumonia, and influenza had been the leading causes of adult deaths, and heart disease and cancer had together accounted for only 12 percent of annual deaths. Advice to eat more made sense.

By the mid-1950's, heart disease and cancer had become the leading causes of death, and researchers were already argu-

ing about whether diet was a causal factor. As research increasingly demonstrated an association between diet and chronic diseases, new dietary advice was needed. But advice to eat less fat, saturated fat, cholesterol, salt, and sugar was controversial right from the start, especially among producers of foods containing these substances.

Despite the arguments, enough evidence was available to justify producing a number of major reports on diet and disease risk in the late 1980's—the "Surgeon General's Report on Nutrition and Health," the National Academy of Sciences' "Diet and Health" study, and the World Health Organization's "Healthy People." By 1992, more than 100 major reports from 36 countries throughout the world had reviewed the research evidence, and had come to the same conclusions:

- Six of the 10 leading causes of death are related to diets too high in calories, fat, saturated fat, cholesterol, salt, or alcohol, and too low in fiber.
- Following dietary recommendations to reduce consumption of these food ingredients will reduce risks of multiple chronic diseases.
- The evidence is sufficient to justify public health campaigns to reduce dietary risks.

USDA's recent policy contributions to this collective effort are the "Dietary Guidelines for Americans" (1990) and the "Food Guide Pyramid" (1992). The "Dietary Guidelines" include seven recommendations:

- eat a variety of foods;
- maintain healthy weight;
- choose a diet low in fat, saturated fat, and cholesterol;
- include plenty of vegetables, fruits, and grain products in the diet;
- use sugars only in moderation;

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- use salt and sodium only in moderation; and
- consume alcoholic beverages only in moderation.

But these recommendations are vague and subject to personal interpretation of terms like "healthy," "low," "plenty," and "moderation." To translate the guidelines into actual food choices, USDA produced the Food Guide Pyramid, which specified numbers of daily servings of foods from various groups:

- 6-11 servings from the grain group;
- 3-5 servings from the vegetable group;
- 2-4 servings from the fruit group;
- 2-3 servings each from the meat and dairy groups; and
- low consumption of fats and sweets (no recommended number of servings).

Embedded in both these USDA documents are target levels for upper limits of consumption of certain nutrients: fat at 30 percent of calories or less, saturated fat at 10 percent of calories or less, and cholesterol at 300 mg/day or less. Also embedded is the recommendation to eat more fiber.

Controversy & Consensus

Dietary advice does not automatically translate into dietary practices. One reason is that advice to eat more fruits and vegetables is not very interesting, and may be difficult to follow in societies like ours where more and more meals are eaten outside the home.

Perhaps most important, such advice suggests reducing intake of meat, dairy, and many processed foods that are principal sources of fat, cholesterol, salt, and sugar in the American diet. The history of dietary recommendations suggests that advice to eat less of any of these foods will

almost certainly have political repercussions.

Despite international consensus on the validity of the recommendations, they remain highly controversial. For more than 30 years, scientists, food industry representatives, and government officials have been arguing about whether the research basis justifies recommended dietary changes.

Yet this uncertain, sometimes contradictory, and endlessly debated research has led to an international consensus on dietary recommendations. The explanation for this curious situation may be quite simple. Research that focuses on single nutrients such as fat, specific fatty acids, sodium, or vitamins will always be suspect; the studies are too hard to do. People do not eat single nutrients; they eat food. But evidence for the health benefits of diets that, overall, contain a large proportion of calories from fruits, vegetables, and grains, and a much smaller proportion from meat, dairy, processed foods, and alcohol, is not in question and never has been.

That is why the Dietary Guidelines have survived controversy and are in a third edition, and that is why we have the Food Guide Pyramid. Advice about optimal food choices has remained the same through decades of debate over nutritional details.

The scientific basis of dietary advice is no longer really an issue. What is at issue is putting this advice into practice.

Policy Could Make A Difference

USDA has an unparalleled opportunity to integrate its food and dietary guidance policies on food assistance, nutrition monitoring, farm support, and food and nutrition research into a comprehensive program to improve the health of all Americans:

Make more agriculture programs available to fruit and vegetable producers. USDA programs that support production and marketing of meat, dairy products,

and processed foods could serve as models for new programs to promote fruits and vegetables. Examples of potential programs:

- subsidies for farmers' markets;
- subsidies for coupons to purchase fruits and vegetables;
- generic marketing programs for fruits and vegetables; and
- price supports to producers and marketers of fresh fruits and vegetables.

Small-scale pilot studies could evaluate the effectiveness of these proposals.

Improve food and nutrition monitoring. National nutrition policies depend on food and nutrient intake data, the basis of all research and education programs related to food and nutrition:

- food supply disappearance (food "consumption" data);
- the nutrient composition of foods (Handbook 8); and
- household and individual dietary intake (NFCS and CSFII).

It is essential that USDA improve the accuracy and reliability of this data, by assigning a high priority to these data bases and providing additional resources to do an effective job.

Increase USDA's nutrition education budget. USDA's education budget is about \$200 million per year, but this amount is divided among seven separate agencies. This situation calls for coordination, particularly since this amount pales in comparison to the \$12-billion advertising budget of the food industry.

USDA could piggyback some of its budget dollars and cooperate to promote the National Cancer Institute's Five-A-Day program. The message of this national campaign—to increase average consumption of fruits and vegetables to five servings a day—is simple, positive, measurable, and easy to evaluate. If USDA could get that message into all its

school, food assistance, and extension programs, this alone could make a big difference.

Existing nutrition programs, such as the Nutrition Education and Training Program (NET), should be strengthened. The NET is an excellent way of educating both students and food-service workers in schools.

In short, USDA policies can do much to improve the nutritional status of its constituents, and the sooner the better.

[Marion Nestle, Professor and Chair, Department of Nutrition, Food and Hotel Management, New York University (212) 998-5595]

USDA's Responsibility To Consumers

Health problems that are strongly linked to diet—tooth decay, constipation, obesity, diabetes, coronary heart disease, hypertension, stroke, and several types of cancer—cost the country well over \$100 billion a year. Diet accounts for more deaths each year than anything except cigarettes. Even more remarkable, studies done in the past 20 years have demonstrated that advanced cases of heart disease, hypertension, and diabetes can actually be reversed by appropriate dietary changes.

As the government's lead agency for nutrition education and food programs, USDA has both the opportunity and the obligation to encourage Americans to eat healthful diets. But the typical American diet demonstrates that USDA needs to do a much better job of informing the public about nutrition and encouraging the public to opt for healthful eating.

Nutrition information should be modernized, and provided in new formats such as videos, radio and TV announcements, and even billboards. This information should be geared to a variety of educational levels, ages, dietary patterns, and ethnic and racial backgrounds.

Educating the General Public...

Tell the public what is the best possible diet. The public should know what kind of diet most effectively promotes health and wards off disease. Current recommendations represent a political and cultural compromise, and call for only modest dietary changes. While industries are not offended and consumers do not feel pressured to make substantial changes, this diet would have only modest health benefits. A diet that produces substantially larger health benefits might, for example, call for a fat level of only 20 percent of calories, a cholesterol intake of no more than 100 mg daily, and routine consumption of whole rather than refined grains.

Develop USDA's food triangle theme for a broader audience. The food triangle, which is aimed at children, may be too simplistic for older, more sophisticated people. For instance, fatty ice cream and skim milk are grouped together in the dairy group. Fatty pot roast as well as fat-free lentils occupy the meat-and-protein group.

For a more sophisticated audience, USDA could develop a true pyramid that divides the foods in each food group into categories of "anytime," "sometimes," and "seldom," based on the foods' content of fat, saturated fat, sodium, and other nutrients. Lentils and skim milk would be grouped as "anytime" foods; chicken drumsticks with skin, and 2-percent lowfat milk, would be "sometimes" foods; and pot roast and ice cream would be in the "seldom" category.

Make all USDA-sponsored promotions consistent with sound nutrition advice. Currently, USDA helps the beef, dairy, pork, and egg industries promote their products by means of research and promotion boards. However, some of their promotion campaigns are inconsistent with USDA and FDA's labeling rules for nutrition claims.

For instance, the pork industry has asserted that pork has less fat, calories, and cholesterol than the same size piece of chicken. But the industry promotions

compare one of the leanest cuts of pork to a medium-fat piece of chicken. The National Dairy Board states that the vitamin A in milk keeps skin smooth, the calcium builds strong bones, and the protein builds muscle. Not mentioned is that whole milk is loaded with saturated fat and cholesterol, which are linked to heart disease.

Watch for deceptive advertising that undermines restrictions on health and nutrition claims in food labeling. Currently, individual companies can make claims in advertising that they are not permitted to make on labels. USDA should urge the Federal Trade Commission to issue regulations on food advertising that are fully consistent with FDA and USDA's labeling rules regarding health and nutrition claims.

... as Well as Schoolchildren ...

USDA's food and feeding programs provide a direct means of improving diets. The National School Lunch Program, which feeds some 25 million children daily, could be teaching good eating habits that will last a lifetime. USDA surveys, however, indicate that school lunches are far too high in fat and sodium. The average meal gets 38 percent of its calories from fat—compared with the recommended 30 percent—and half again more than the recommended level of saturated fat. Meals have twice the recommended amount of sodium. In other words, schools actually provide diets that are bad for children's health.

USDA should set better standards for school lunches. Quantitative standards should determine the fat, saturated fat, cholesterol, fiber and sodium, and sugar content of school lunches and breakfasts. Those standards should be based on USDA's "Dietary Guidelines for Americans" and other authoritative recommendations issued by government and the National Academy of Sciences.

Regulate the sale and service of competitive foods. To help schools serve more nutritious meals, USDA should require

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vendors to provide nutrition information on all products sold to schools. The Department should also require that all food sold in school snack bars, vending machines, and other means meet standards for fat, saturated fat, and other nutrients—the same standards as for school lunches.

Supply commodities of higher nutritional quality. Ironically, some federally subsidized food commodities are an impediment to offering wholesome school lunches. In 1992, \$675 million in subsidized commodities was donated to school lunch and breakfast programs. Those commodities—in the form of processed cheese, frozen or canned meats, canned fruits and vegetables, oils, butter, flour, and other staples—represent one fifth of each school meal.

Many of those commodities are high in fat. Among the vegetable commodities, a bite-sized fatty potato product tops donations. That product gets 42 percent of its calories from fat, compared with a baked potato, with less than 1 percent calories from fat. USDA has compounded the problem by recommending they be served "with melted cheese or gravy." USDA should revise its food-purchasing practices to provide schools with a more healthful commodity mix.

... & Food Stamp Recipients

USDA also has an opportunity to educate the 27 million Americans who participate in the Food Stamp Program. Unfortunately, it's largely a missed opportunity, with only one-seventieth of 1 percent (0.015 percent) of the food stamp budget going toward nutrition education.

Funding for a major educational campaign aimed at food stamp recipients could come from the money that food retailers and USDA will save as the EBT, or Electronic Benefits Transfer system, is phased in over the next few years. EBT

is expected to save retailers about \$135 million and USDA about \$27 million each year. Investing half of those savings in a comprehensive educational program—using the mass media and other social-marketing approaches—could help low-income Americans make the best use of their food-stamp dollars. The funding mechanism for this program would call on retailers to designate one-third of 1 percent of their food-stamp sales to the educational fund.

Assessing the Results

The public expects USDA to use its tremendous resources to improve the diet and health of schoolchildren, food stamp recipients, and all Americans. USDA's performance should be evaluated on the basis of the effectiveness and visibility of its educational programs, changes in the commodities program, and improvements in school meals over the coming years.

[Michael Jacobson, Executive Director, Center for Science in the Public Interest (202) 332-9110] **AO**

Upcoming Reports from USDA's Economic Research Service

The following reports or summaries will be issued at 3 p.m. Eastern time on the January release dates indicated.

January

- 13 Cotton & Wool Update
- 14 Hog Outlook
- 14 Feed Update
- 21 Oil Crops*
- 21 Livestock, Dairy & Poultry
- 24 U.S. Agricultural Trade Update

* Release of summary

Environment & Resources



An Ecosystem Approach To Resource Management

USDA is preparing to enter the next century with a new natural resource management pattern, or paradigm, in place. The new approach, called ecosystem management, will blend the practical expertise of farmers and foresters with the scientific principles of ecology.

Ecosystems—biological communities and their interactions with the environment—can be as small as a single woodlot or an Iowa cornfield, and as large as the Pacific Northwest forest or the Mississippi River watershed. The new approach emphasizes maintaining and improving ecosystems—and providing sustainable levels of goods and resources.

Under ecosystem management, decisions about resources may be made after considering impacts on the larger ecosystem containing the individual farm, ranch, or woodlot. The reason is that the implications or consequences of many activities, such as logging old-growth forests, or farming on floodplains, become more ap-

parent at a broader landscape perspective and when followed through time. Partnerships and teams of individual landowners and resource managers are encouraged.

The two USDA agencies responsible for natural resource management and conservation—the Forest Service and the Soil Conservation Service (SCS)—are in transition to ecosystem management. The Forest Service adopted an ecosystem management philosophy in June 1992, and is addressing questions such as what defines sustainability. The Soil Conservation Service has been moving toward this more holistic approach for about 3 years.

The "Butternut Coalition," a regional partnership of government agencies, universities, and the National Association of State Foresters, illustrates the effectiveness of using the team approach and the broader landscape perspective in solving difficult resource problems. The coalition organized in response to a serious disease outbreak affecting butternut trees across the South and Northeast, with the objective of keeping the butternut tree on the landscape. Through their sharing of genetic material, cooperation on applied research, and development of special management practices, the coalition has largely met its objective.

Features of the Ecosystem Approach

The transition to ecosystem management is expected to be a gradual shift over time in USDA's management practices. Ecosystem management is being adopted because it provides a framework for making ecologically responsible, economically viable, and socially acceptable resource management decisions. While these attributes are not new in USDA decision making, what is new is the integration of these attributes in framing management choices.

Ecologically responsible management is sustainable over time, and maintains the structure, function, and processes of the natural environment. Under the new management approach, the expertise from 100 years of past management of

forest resources will be blended with recent information and principles developed under the ecological sciences.

USDA's past management has focused primarily on extracting goods and services from the National Forests and Grasslands. While society will continue to need and expect to have goods and services from the land, USDA will increase its emphasis on maintaining or improving the condition of the land as the context for providing sustainable levels of goods and services. In providing goods and services, the volume and timing must be considered within the capacity and suitability of the land.

More attention will be placed on understanding the ecology of national forest lands and other resources. Scientifically credible information about forest ecology will be more effectively applied in making management decisions. The interrelation among the components of the environment, including humans, has not been focused on sufficiently up to now. Better knowledge of the interrelationships—not just of the individual components—will allow USDA to manage the land more efficiently and effectively and redeem its stewardship responsibilities. Increasing emphasis will be placed on adapting management practices over time, as the effects of activities are monitored.

Multiscale analyses will aid decision making and monitoring. USDA will increase its effectiveness as it improves understanding of the capacity of the land and monitors the effects of management at varying scales (over both time and area). This approach is in contrast with the traditional approach, which emphasizes site-specific analysis.

Ecosystem management offers a way to view ideas, management, and agricultural activities in context—spatially and over time. Individual sites such as farms, woodlots, or ranches, or a tract on the National Forest, are part of watersheds, which form landscapes that may be aggregated to higher and higher scales to encompass the planet. The recognition of how each component nests within larger components is the foundation of the ecological approach to management.

A land manager or landowner faces many challenges that he or she simply cannot solve individually, or in some cases even recognize. Taking an ecological approach across the landscape promotes better understanding of the situation while allowing individual landowners to be most effective in achieving their objectives.

The Sequence Of Success

Ecosystem management is an approach that can be useful to individual landowners as well as Federal or other public land managers. For either a public land manager or an individual landowner, the sequence of ecosystem management steps would be similar:

- *Identify and understand resource conditions and trends.* Is the land suitable and capable to provide goods and services in a sustainable way, based upon the interrelationships among people and the other components of the environment?
- *Consider resource conditions on the surrounding landscape.* For example, what is happening at the higher scale that will influence the condition and trends on the specific tract of land?
- *Determine desired conditions* within the context of the land's capacity and suitability, including conditions of the land over time as well as the goods and services to be derived. For public land managers, these desired conditions would be identified by ongoing open public dialogue.
- *Identify the actions necessary* to achieve and sustain the desired conditions.
- *Monitor the effects of management activities* and adjust actions as appropriate.

Among the many programs of the Forest Service, none is better suited for delivering ecosystem management assistance to private nonindustrial forest landowners

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Ecosystem Management: The Greenville Model

The ecosystem approach taken by the Greenville community in northern California's Plumas County illustrates how environmental issues will be increasingly addressed in 1994 and beyond. The approach is based on ecosystem management principles, involves all concerned parties in the decision-making process, provides incentives, and focuses on sustainability for current and future use.

Greenville began a major effort to solve a host of resource problems when the Pacific Gas and Electric Company estimated it would have to spend \$64 million in dredging fees, or close its Rock Creek Dam hydroelectric powerhouse which was up to its intakes in sediment.

In addition, a lower water table and other land use changes were causing Wolf and Red Clover Creeks to undercut their banks and flood, threatening businesses, homes, and some surrounding farmland. The Feather River trout population had dropped drastically in the wake of mining, sediment, dams, and trash deposits. Endangered species protection and other factors had reduced timber harvests. The Greenville community also had another major concern—a 26-percent unemployment rate.

In 1987, 13 agencies and organizations, including USDA's Forest Service and Soil Conservation Service (SCS), signed an agreement to create a broad erosion control mission to halt some of the problems at the source. Coordinated Resource Management (CRM), a consensus-building process involving all concerned parties, was chosen as their problem-solving approach. Under this method, no action is taken until everyone agrees. The community agreed that its natural resources were its economic capital: if the community could not keep them

healthy, as an ecosystem, its own economic returns would be reduced.

The community partnership decided on the problems and objectives to be addressed, raised \$2.5 million, and conducted 33 projects and studies. Cumulative effects, rather than single polluter problems, were the focus of the studies, and topics included stream bank erosion control, water table enhancement, fish habitat restoration, and economic development. Students from two local high schools monitored resource improvements, gaining experience and training in resource conservation work.

Individual ranchers worked to stabilize stream banks on their property by restoring riparian (water-related) vegetation, with assistance from SCS and Federal cost-share funds. The stream bank stabilization by a single rancher reduced the stream's sediment load by 1,000 tons a year, reducing dredging costs by approximately \$6,000.

At the watershed level, Wolf Creek no longer threatens Greenville's homes and businesses, jobs are being created, and lifestyles, cultural values, and economic needs are being addressed. At the individual level, better pasture use and fishing are available to the land user. Also, the trout and bird populations, including the endangered bank swallows, have increased.

An ecosystem-based approach is not easy, since it requires a more comprehensive way of looking at the world and requires that more people work together in addressing resource issues. But it is a more effective approach for ensuring a productive nation in harmony with a quality environment.

than the Forest Stewardship Program and the Stewardship Incentive Program. Each is intended to provide professional assistance to landowners on a voluntary basis to meet their own objectives in an environmentally sensitive and economically beneficial way. Authorized by the 1990 Farm Act, the programs to date have provided more than \$21 million in assistance to 25,000 landowners.

State Stewardship Committees are operating in every state and can provide an outstanding forum for discussing ecosystem management applications to meet local needs and objectives. A few of the state committees have formally adopted ecosystem management concepts. The reason these programs are well positioned for ecosystem management is that they

are based upon voluntary partnerships, a cornerstone of USDA's state and private forestry activities.

The Soil Conservation Service is also updating its programs to provide ecosystem-based assistance to individuals and communities on a voluntary basis. Technical and financial assistance will continue to use and build upon the SCS planning process and Field Office Technical Guide, which addresses the interactions among resources. Ecosystem-based assistance provides an interdisciplinary approach to many resource goals, such as soil conservation and water quality improvement. This approach will help avoid conflicts that occasionally occur

when individual solutions are developed to address complex resource problems and legal requirements.

Widespread adoption of the ecosystem management approach with its more prudent management activities will bring more cost-effective methods for achieving conservation objectives. And a more harmonious co-existence with the natural environment will evolve as USDA integrates environmental, social, and economic objectives, and brings science into a stronger partnership with management. [Joan M. Comanor, Director, Land Management Planning and Ecosystem Management, Forest Service, USDA (202) 205-1697; Diane Gelburd, Associate Deputy Chief, Soil Conservation Service, USDA (202) 720-3587] **AO**

Ag Pollution: A New Generation Of Rules?

The agricultural community today is deeply concerned about the quality of water that nourishes its crops and livestock and sustains its farm families. Recent government reports on the magnitude of agricultural nonpoint-source pollution—soil erosion and runoff of chemicals and sediment from cropland—have heightened this concern.

The farm community is also apprehensive about an impending proliferation of rules and regulations that will come with reauthorization of the Clean Water Act. Behind these twin concerns are two principal reasons.

First, the Coastal Zone Management Act—the first Federal program to require specific measures to address agricultural nonpoint-source pollution—is already law. The Coastal and Great Lakes states are struggling as they attempt to meet these requirements in developing nonpoint-source programs. Second, the Congressional committees that will be developing the Clean Water Act for reauthorization are not agricultural committees with a background in understanding farm issues.

Society has legitimate concerns about surface- and groundwater pollution from agricultural operations. The question is, what is the best approach to limiting agricultural pollution? Some have characterized the options as either regulatory or voluntary approaches. The reality will probably be a combination.

Voluntary Compliance Gets a Chance

Agricultural producers will likely have a small window of opportunity to install pollution abatement practices voluntarily on their farms and ranches across the

country. However, some regulatory process will probably be put in place, to be triggered if the voluntary effort fails.

The entire agricultural community—farmers, ranchers, farm organizations, farm press, input industries, and resource organizations, as well as USDA—has a stake in working together to make the voluntary approach a success. Partnership is a keystone of ecosystem management (system-wide conservation planning), and can demonstrate that the agricultural community can respond and improve water quality.

One likely feature of the reauthorized Clean Water Act would require states to develop a priority list of impaired or threatened waters. States would have options for curbing nonpoint-source pollution in the waters on the priority list.

- The first option would involve installing specific pollution abatement and prevention practices for all nonpoint sources in priority watersheds. A crash effort would be needed to install the practices within the time period allotted for voluntary action.
- The second option involves a more systematic, targeted approach—referred to as the “watershed approach.” Watersheds are the land areas that drain into a stream, lake, or estuary. Under this approach, a plan of action to control pollution would evolve gradually for priority watersheds, and involve community participation.

Watershed Approach Is Most Promising

Watersheds usually encompass multiple land uses, soils, geology, and biota, and receive both point and nonpoint-source pollution. The watershed approach to controlling agricultural pollution is an example of ecosystem management, which coordinates the conservation of water, air, plants, and animals, as well as their interactions.

The watershed approach holds the most promise for agriculture, soliciting local input in developing corrective actions. Farmers, ranchers, and rural communities would be encouraged to participate in the planning process. And their participation would help them understand the water quality concerns, sources of water pollution, and the corrective actions needed.

Some of the key features in implementing the watershed approach are described below.

Priority watersheds would be ranked for action-plan development. States would have significant control over the watershed planning schedule, and would likely use a sequential process to develop action plans for watersheds on the priority list. Plans for the highest priority watersheds would be developed before proceeding to the remaining watersheds on the list.

Watersheds occur on the landscape in a nested arrangement, with large watersheds containing smaller ones. In developing conservation plans, a state water quality agency might select a large watershed as a priority area of concern. After scoping the sources of pollution and the water quality conditions, smaller watersheds within the large one might then be selected for a concentrated effort in developing an action plan.

The smaller the watershed, the easier it is for local people to get involved in the planning process. Conservation planners for the Chesapeake Bay, for example, found that farmers in upstate Pennsylvania and other distant areas had difficulty linking their actions on the farm to the impact on the bay. The planners are now concentrating on smaller watersheds within the large Chesapeake Bay watershed area. Farmers are helping to improve the quality of their nearby streams, delivering cleaner water to the bay.

USDA outreach would focus on expanding local involvement in defining and solving pollution problems. Once the smaller watersheds are selected, USDA would use an aggressive outreach program to solicit the involvement of everyone in the watersheds. Local residents will want to know what the water quality

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problem is, and the source of the pollution. They will also want to know the potential solutions.

Solving water quality problems will generally require understanding the entire watershed ecosystem, and few problems can be solved by reducing just one pollution source. An understanding of the interactions between human activity and natural resources will also be required. As the local residents better understand the ecosystem, they will begin to realize how to solve the water quality problems. Farmers and others will then be willing to make changes in their day-to-day practices to improve water quality.

In one USDA water quality project, the stream near a farming community was deteriorating because of sediment deposits from soil erosion and sediment runoff. Public awareness of the problem was low until USDA arranged canoe trips for farmers to survey the polluted stream. After seeing the soft mud bottoms in the stream's pools, and the reduction in aquatic life in areas of sediment deposition, farmers were convinced that sediment reduction was necessary.

As a result of those canoe trips, farmers have made major progress in implementing USDA's recommended sediment reduction practices. In addition, the farmers are now developing their own ideas for reducing sediment, such as re-establishing trees in stream corridors.

Site-specific plans would emerge from analysis of larger ecosystems. Site-specific farm and ranch plans would be needed to help fit all the pieces together. The complexity of the interactions between the inputs, resources, crops grown, and farm/ranch management rules out "cookie cutter" plans. Solutions have to be tailored to the individual farm and ranch operation.

Water quality monitoring would measure progress. As USDA's limited resources are targeted on water quality, monitoring will be needed to measure progress in reaching water quality goals. By keeping records of when pollution-reducing practices are installed on the land, and comparing installation progress with water quality data, USDA can partially meas-

ure ecosystem response. Monitoring also gives local people the data to demonstrate to the water quality agency that installation progress is occurring.

Complete reliance on water quality monitoring may yield misleading conclusions, however, because of the time lag for some surface- and groundwater systems to respond to pollution-reducing practices. For example, in a USDA water project with a goal of reducing phosphorus, pollution-abatement measures were installed but water quality did not significantly improve. Additional tests revealed that soils near the streams had been receiving high levels of phosphorus from animal manure for decades and were saturated. It will take 20 to 30 years to fully use the excess phosphorus and reach the desired water quality goals.

Therefore, documentation of pollution-reducing practices should be coordinated with water quality monitoring. This will help USDA project managers and local people understand ecosystem response and the need for possible adjustments in the pollution abatement measures, and in interpreting the monitoring results.

Watershed Approach As a Framework

The watershed approach to controlling agricultural water pollution provides a framework for coordinating system-wide conservation planning for other types of pollution problems. Using ecosystem-based planning, the watershed approach can provide crosswalks between the various environmental laws affecting agriculture. Conservation goals specified in the Food, Agriculture, Conservation and Trade Act, for example, could be connected with those contained in the Clean Water Act.

The watershed approach can be a success if everyone gets involved in the conservation planning process. The agricultural press can help announce opportunities for farmers and ranchers to become involved. Agricultural organizations can encourage their members to become involved, and provide information for improving operations. The farm input industry can produce special equipment for pest control to help improve water quality.

Finally, USDA must build stronger partnerships with farmers and ranchers, state and Federal agencies, and others involved in resource planning, so that conservation goals can be established and accomplished more effectively as a team. [John Burt, Associate Deputy Chief, Soil Conservation Service, USDA (202) 690-2500] AO

Upcoming Reports from USDA's Economic Research Service

The following reports or summaries will be issued at 3 p.m. Eastern time on the February release dates indicated.

February

- 11 Cattle & Sheep Outlook
- 14 Feed Update
Oil Crops Update
- 15 Agricultural Income & Finance*
- 18 Agricultural Outlook*
U.S. Agricultural Trade Update
- 22 Wheat*
Livestock, Dairy & Poultry
- 23 Poultry Outlook
Dairy Outlook
- 24 Cotton & Wool*
- 25 Agricultural Exports*

* Release of summary

Rural Development



The Diversity Of Rural America

John Kennedy's agricultural adviser argued that American agriculture is too complex to represent with statistics on the "average farmer." Rural America, similarly, is complex. What is accurate for the Delta of Mississippi and Arkansas may have little similarity to the Central Valley of California or to the mountains of North Carolina.

Each of us carries around one or two images of "average rural America," often based on limited experience. The diversity of America is its great strength, but the limited knowledge most people have of rural America's diversity makes it difficult to talk about its future directions and formulate appropriate rural policy.

But a number of statements can be made about rural America in the aggregate.

- *The U.S. is now dominated and defined by its suburban communities, rather than by its rural edge.* In 1990, for the first time in the country's history, over 50 percent of the population lived in metropolitan areas containing over a million people. And most of the growth that has oc-

curred since 1950 in these urban areas has been in the suburban ring—not the inner city.

- *Rural America's population is still declining.* As a percent of the country's total population, rural population has been declining almost since the founding of the Republic. In 1920, urban population exceeded rural population for the first time. By 1990, only 25 percent of the nation's population lived in rural areas.
- *Approximately 84 percent of the contiguous land mass of the U.S. is rural,* according to definitions developed by the Office of Management and Budget. Nationally, approximately 2,300 counties are rural.
- *Agriculture no longer dominates rural America.* In 1890, 24.8 million Americans (42.3 percent of the total population) lived on farms. By 1990, only 3.9 million (1.5 percent) lived on farms. Agriculture is no longer the major source of employment in rural America, and it is no longer the major source of income for the majority of farmers.
- *Rural Americans are more likely to be poor than their urban relatives, and the gap is growing.* Fifty-one percent of rural residents fall into the two poorest quintiles, compared with 37 percent of those in metropolitan areas. In 1987, per capita rural income was only 73 percent of urban per capita income, down from 77 percent in 1979. Thirty-six percent of all rural children live near or below the poverty level, compared with 29 percent in urban areas.

Four Views Of Rural America

Rural America can be seen as containing four kinds of counties, depending on their concentration of natural resources and agriculture, manufacturing, poverty, and population. While some counties may fall into more than one category, and other categorization schemes could be used, these four views are useful

frameworks for examining the various opportunities and needs of rural communities.

Natural resource- and ag-focused areas include the approximately 500 agriculture-dependent counties that are located mainly in the Great Plains (with smaller concentrations in the lower Mississippi Delta and parts of the intermountain West), and the 105 mining-dependent counties that are concentrated primarily in the middle Appalachian region. The rest are spread throughout the country with clusters in the West. This category also includes a number of timber- and recreation-dependent counties.

The outlook for these counties is mixed. Natural resource-dependent communities that are near urban areas have substantial opportunities to increase tourism and specialized value-added food and wood processing. At the same time, these areas are likely to experience the greatest conflict over differing environmental values. Suburban people, who are now the majority in the U.S., are likely to be highly suspicious of assurances by farmers, forest products companies, and others that have traditionally controlled much of rural development in these areas.

While demands for more environmental regulation continue, these rural areas will continue to be exposed to many issues reaching well beyond the farmstead and the woodlot. Tax policy, trade policy, and monetary policy will have much to say about the economic viability of natural-resource-dependent areas in the next year and the next decade.

Manufacturing-focused areas cover the largest part of rural America. About 945 counties (approximately 40 percent of rural America) fall into this category. These counties are located largely in the eastern two-thirds of the country, with a small concentration in the Northwest.

This part of rural America includes a mixture of businesses that are based on cheap labor and those based on some other competitive advantage. Rural communities that depend on low labor costs are not likely to fare well in the increasingly competitive global market. Rural manufacturing areas must compete based

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on quality and other competitive advantages, not tax giveaways and poor-quality jobs. As with the natural-resource-dependent areas, tax policy, trade policy, and monetary policy will have a substantial impact on the economic viability of rural manufacturing areas.

Persistent poverty areas include about 500 counties clustered in the deep South, the southern two-thirds of Appalachia, parts of the Ozarks, and in the western areas with significant numbers of Native Americans or Hispanics. In many of these areas, farming is not currently a major source of personal income, and these areas are less affected by shifts in the international marketplace.

Past economic development efforts here have been largely unsuccessful. If these areas are to experience increased economic opportunity, it will require increased, highly strategic efforts involving all levels of government. Without such targeted investments, these areas are likely to continue be pulled down by persistent poverty and lack of opportunity.

Low-density areas exist almost entirely between the 100th Meridian and the eastern slope of the Pacific coastal mountain range. This is the area that Rutgers University researchers have called the "Buffalo Commons." Forming the heart of this low-density region are the 396 counties of the Great Plains. In this area, people have been moving from rural counties to urban areas for almost every decade since 1930.

This region, highly dependent on agriculture and energy, has the potential to slide into long-term economic difficulty. Simply relying on the marketplace is not likely to help this region of the country during the next year or 5 years. New government initiatives will be required to ensure the economic viability of much of this part of rural America. The further an isolated county is from an urban concentration, the more fragile its economic future.

Outlook for 1994

Some portions of rural America will likely experience traumatic change during 1994, similar to the trauma in the upper Midwest with the floods of 1993 and in portions of the Northwest facing timber issues. It is difficult to estimate the size and location of these areas, but possible candidates include:

- tourist areas dependent on uncertain energy prices;
- irrigated portions of the Central Valley of California if fires and water conflicts continue; and
- the Upper Midwest again, given likely production problems due to high levels of soil moisture at the end of the 1993 growing season.

The diversity of rural America represents a major challenge to the Federal government and to USDA in particular in 1994. The natural-resource-dependent parts of rural America will experience continuing pressure over environmental concerns. In general, however, these regions are well positioned to compete in an increasingly competitive world, especially if there is a "level playing field." The parts of rural America with the most scenic natural resources and special recreational and retirement amenities are likely to experience substantial growth and conflict.

Manufacturing-dependent areas include highly competitive individual firms but also some that are not likely to prosper. Government investment, tax, and capital policies can do much to help these parts of rural America.

Two sectors of rural America need special attention and assistance from the Federal government and USDA: the persistent poverty regions and the lowest density regions. The approaches to these special needs should be cooperative and tailored to the local situation and to market opportunities. Finally, some parts of rural America will experience dramatic human-made or natural structural shifts. The Department needs to be ready to assist these areas.

All of this is occurring in a national political environment that will be increasingly dominated by suburban voters and their representatives. The Department and rural leaders will need to create new alliances to address the specific problems of rural America.

[Karl N. Stauber, Vice President of Programs, Northwest Area Foundation; recently appointed to a senior position in rural development within USDA] AO

Health Care Reform & Rural Communities

The Clinton Administration's proposal for health care reform, designed to secure and provide better health care for all Americans, will benefit farmers and rural communities — both in the universal provisions and in specific provisions to help rural communities and other underserved areas.

Rural communities have proportionately more uninsured and underinsured residents than their urban counterparts. Currently, 8 million rural Americans (18 percent of the total) have no health insurance at all, including 18 percent of all farm families. Few have the protection of membership in a large business or purchasing group that can successfully negotiate lower premiums. Rural communities also lack health care providers, due partly to the isolation and the poor insurance coverage in many rural areas.

Under the universal provisions of the health care reform plan—the Health Security Act—every American citizen and legal resident would have health insurance coverage that could never be lost, even by someone who loses a job, switches jobs, or starts a small business. Risk would be spread over larger pools of people through regional purchasing alliances. The alliances are purchasing cooperatives that give consumers, especially those in rural areas, more leverage

to negotiate reasonable prices for health care plans.

The Health Security Act would also broaden and guarantee access to services for all Americans. For rural and underserved communities, the plan includes grants, tax credits, and financial incentives to increase the number of primary care physicians, nurse practitioners, and physician assistants locating there.

For farmers and other self-employed Americans, the plan provides a low-cost mechanism to insure their employees as well as their families. It would also increase their tax deductions for health care from 25 to 100 percent of costs.

Small businesses are the leading incubators of new jobs in the U.S., and their treatment under reform is of special concern in rural communities. The Administration plan would cap employer contributions to health care costs at a percent of payroll, as a way of helping them meet their responsibility without putting them at economic risk.

The Mechanics Of Reform

The ranks of the uninsured are growing, and the majority are workers and their families who can't afford the insurance that is being offered. In addition, much of the insurance available to individuals and small groups has no coverage for catastrophic care and preventive services. And insurance plans are increasingly offering less and less choice about health care.

Under the Administration plan, every American citizen and legal resident would have a health security card. Exclusions for pre-existing conditions would be outlawed, and there would be open enrollment. Health plans would have to accept all applicants, with guaranteed renewal.

The reform plan is based on four major principles.

- **Security** is provided by requiring that health insurance coverage could never be lost, even if someone loses a job, switches jobs, or starts a small business.
- **Cost savings** are emphasized so that this expanded coverage is affordable over time, with the assurance of the same quality of care.
- **Choice** would be ensured because it is preferred by many Americans and it helps keep costs down through competition. People may choose to join a physician network, a health management organization (HMO), or a traditional fee-for-service arrangement, although the latter may involve a higher cost. In rural areas that lack a managed care plan, residents would still be guaranteed fee-for-service coverage. In addition, the plan provides incentives to develop managed care plans in areas that don't have them.
- **Responsibility** is built in by having everyone contribute to the system. Health care would not be free.

The plan would create large purchasing pools, called alliances, which all Americans would belong to whether they are employed or unemployed, rural or urban. States would establish alliances and geographic boundaries in accordance with national standards of quality, access, and cost control. These alliances are designed to give consumers and small businesses the power to buy affordable care.

The alliances would enroll all eligible residents, collect premiums, and pay the chosen health insurer. They also may administer subsidies for people who are unemployed or who earn low wages. Small businesses that have a high percentage of low-income employees would be eligible for premium discounts that make coverage of their employees more affordable.

Alliances would not cross state lines, but health care plans could. This is an important consideration for sparsely-populated states, such as North Dakota and South Dakota, where markets may be across the state line.

The role of the Federal government would be to set the basic framework and guarantee the benefit package, while states would be responsible for implementing and monitoring specific provisions of the health reform plan. States would certify that insurance plans meet Federal criteria and any additional criteria the states wish to impose. States would also be responsible for monitoring quality and access to care, and for implementing the insurance and malpractice reform outlined in the Administration proposal.

Operating within the Federal framework, states could adopt health reform arrangements of choice, including single payer, managed competition, and others—as long as they meet Federal standards for universal coverage and access, comprehensive benefits, quality of service, and cost containment. Alliances would serve as the collective purchasing agent for employers and consumers. Rather than many insurance agents marketing health plans to individuals, the alliances would solicit bids from the plans.

More of the health insurance premium would be channeled into preventive care. Mammograms, pap smears, immunizations, prenatal care, and other preventive services are covered under the proposal, and would not be subject to any co-pay, co-insurance, or deductibles.

Other features include expanded home care benefits, outpatient rehabilitation benefits, hospice care, and a new prescription drug benefit in the medicare program. Also, the proposal would exclude lifetime cost or time limits on care. Currently, in many cases of serious illness, lifetime limits are reached and insurance terminates.

Rural Development

Provisions Targeting Rural Communities

The plan includes a number of provisions designed specifically to meet the needs of rural communities and other underserved areas.

- The National Health Service Corps would be greatly expanded by the year 2000—approximately 3,000 additional practitioners would be serving rural America.
- A flexible grant program would be created to develop rural networks, especially in hard-to-reach areas. Funds would help to establish health care practices, telecommunications linkages, and insurance networks.
- Tax credits would be offered for primary care providers serving rural and urban underserved areas—up to \$1,000 per month for physicians (\$500 for nonphysician primary care providers) for up to 5 years.
- Physicians who provide primary care services in underserved rural areas, with either new or established practices, would have an expanded allowable expense depreciation for equipment—up to \$17,500.
- The bonus medicare pays to physicians who serve in rural and underserved areas would increase from 10 percent to 20 percent.
- Telecommunications in rural and underserved areas would be supported through the expansion program.
- Alliances would be permitted to offer incentives to health care plans to encourage them to provide coverage to rural areas, and the plan mandates that those areas be covered. The proposal would set standards for reasonable time and access to services, and supplemental grants to providers in underserved communities to assist in transportation and other services that enable people to obtain care.

- Community and Migrant Health Centers and rural health clinics would be designated essential providers. The proposal specifies that health plans must contract with "essentials" for services provided under the benefit package for a 5-year transition period.
- The Indian Health Service is extended, and its benefits package would be broadened. Native Americans would also be covered by their regional alliance—giving them a choice for the first time.

For all small businesses, the employer contributions to health care costs would be capped as a percent of payroll. For those with less than 75 employees, the cap would be on a sliding scale tied to number of employees and average wage in the firm. For example, a firm with under 25 employees, and an average annual wage of \$10,000, would have a 3.5-percent cap and would pay \$350 per employee at most each year.

State Efforts Also Critical

While the shape of health care reform is still being debated, there is now a consensus on the need for change. The issue of how to reach the same goal of quality, affordable health care for all Americans is being argued in Congress as well as at the state level.

States are already moving rapidly to develop their own health initiatives. Hawaii, Washington, and Minnesota have already made progress in developing their own versions of reform, and California, Iowa, Florida, Vermont, and other states are working on new systems.

States will play a critical role in implementing health care reform. Rural leaders must become active at the Federal and state levels if reform is to work for rural America. Meaningful reform of the health care system will take commitment and vision—a vision of America in which no matter where people live—the large cities in the East, the farm communities in the Midwest, or the mountain towns in the West—they will get the health care they need.

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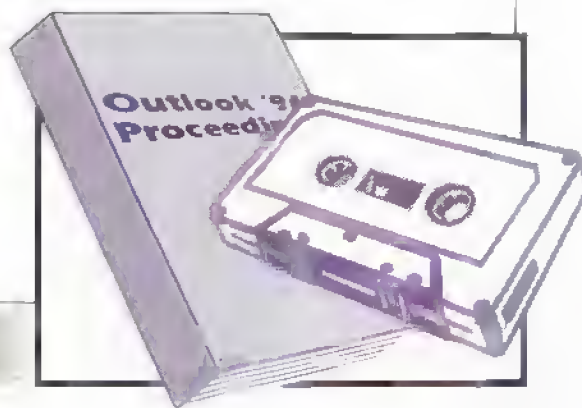
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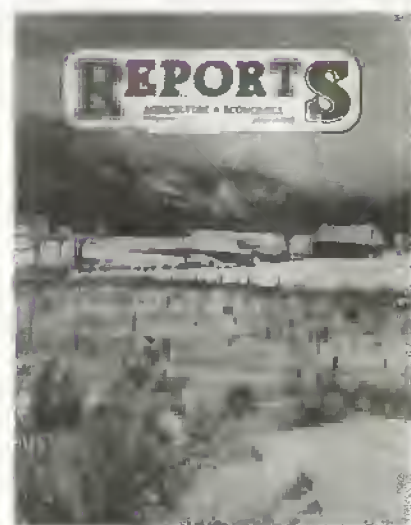
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NOTE: Each issue of *Agricultural Outlook* contains highlights of the situation and outlook for the following commodities—

- **Livestock:** cattle, hogs, broilers, eggs, turkeys, dairy
- **Crops:** wheat, rice, feed grains, oilseeds, cotton, tobacco, sugar, vegetables, fruit

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Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1992	1993					1994		
	Annual	I	II	III	IV F	Annual F	I F	II F	Annual F
Prices received by farmers (1977=100)	140	139	146	140	145	142	—	—	—
Livestock & products	157	159	167	161	159	162	—	—	—
Crops	121	117	126	118	130	122	—	—	—
Prices paid by farmers, (1977=100)									
Production items	174	176	179	178	181	179	—	—	—
Commodities & services, interest, taxes, & wages	191	194	197	197	199	197	—	—	—
Cash receipts (\$ bil.) 1/	172	183	185	—	—	—	—	—	—
Livestock (\$ bil.)	86	87	89	—	—	—	—	—	—
Crops (\$ bil.)	85	78	96	—	—	—	—	—	—
Market basket (1982-84=100)									
Retail cost	138	141	142	—	—	—	—	—	—
Farm value	103	105	107	—	—	—	—	—	—
Spread	157	160	160	—	—	—	—	—	—
Farm value/retail cost (%)	28	28	27	—	—	—	—	—	—
Retail prices (1982-84=100)									
Food	138	140	141	141	141	141	—	—	—
At home	137	139	140	140	140	140	—	—	—
Away from home	141	142	143	144	144	143	—	—	—
Agricultural exports (\$ bil.) 2/	42.4	11.4	10.1	9.2	11.5	42.6	11.5	10.1	42.5
Agricultural imports (\$ bil.) 2/	24.3	6.4	6.3	5.7	6.3	24.5	6.2	6.0	24.5
Commercial production									
Red meat (mil. lb.)	40,795	9,716	9,993	10,360	10,523	40,592	9,952	10,172	41,378
Poultry (mil. lb.)	26,398	6,542	6,987	7,032	6,970	27,531	6,880	7,315	28,840
Eggs (mil. doz.)	5,883	1,458	1,471	1,487	1,635	5,951	1,485	1,490	6,015
Milk (bil. lb.)	151.7	37.8	39.6	37.5	37.0	151.9	37.9	39.8	153.3
Consumption, per capita									
Red meat and poultry (lb.)	208.4	50.4	51.1	52.3	54.2	208.0	51.3	52.4	212.2
Corn beginning stocks (mil. bu.) 3/	—	1,100.3	7,908.4	5,678.2	3,709.4	—	2,112.7	—	—
Corn use (mil. bu.) 3/	7,916.1	2,674.1	2,229.2	1,970.9	1,599.5	6,473.6	—	—	7,750.0
Prices 4/									
Choice steers—Neb. Direct (\$/cwt)	75.36	80.65	79.78	73.77	71-72	76-77	70-78	72-78	71-77
Barrows & gilts—Ia, So. MN (\$/cwt)	43.03	44.92	47.59	48.05	44-45	46-47	43-49	46-52	44-50
Broilers—12-city (cts./lb.)	52.8	53.1	55.8	56.9	54-55	55-56	50-56	50-56	50-56
Eggs—NY gr. A large (cts./doz.)	65.4	75.6	73.4	69.6	70-71	72-73	66-72	62-68	66-72
Milk—all at plant (\$/cwt)	13.09	12.33	12.90	12.67	13.15-13.35	12.75-12.85	11.50-12.50	10.90-11.90	11.45-12.45
Wheat—KC HRW ordinary (\$/bu.)	3.91	3.82	3.48	3.36	—	—	—	—	—
Corn—Chicago (\$/bu.)	2.41	2.18	2.27	2.36	—	—	—	—	—
Soybeans—Chicago (\$/bu.)	5.68	5.63	5.95	6.66	—	—	—	—	—
Cotton—Avg. spot 41-34 (cts./lb.)	53.9	55.2	55.7	53.8	—	—	—	—	—
	1985	1986	1987	1988	1989	1990	1991	1992	1993 F
Farm real estate values 5/									
Nominal (\$ per acre)	713	640	599	632	661	668	681	684	700
Real (1982 \$)	657	568	518	530	533	517	505	487	488

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Sept.-Nov. first quarter, Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages, Jan.-Dec. 5/ 1990-93 values as of January 1. 1986-89 values as of February 1. 1985 values as of April 1. F = forecast. — = not available.

U.S. & Foreign Economic Data

Table 2.—U.S. Gross Domestic Product & Related Data

	Annual			1992		1993		
	1990	1991	1992	III	IV	I	II	III
.\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross domestic product	5,546.1	5,722.9	6,038.5	6,059.5	6,194.4	6,261.8	6,327.6	6,394.8
Gross national product	5,567.6	5,737.1	6,045.8	6,067.3	6,191.9	6,262.1	6,327.1	6,397.4
Personal consumption expenditures	3,761.2	3,906.4	4,138.9	4,157.1	4,256.2	4,298.2	4,359.9	4,419.4
Durable goods	468.2	457.8	497.3	500.9	518.6	515.3	531.6	541.8
Nondurable goods	1,229.2	1,257.9	1,300.9	1,305.7	1,331.7	1,335.3	1,344.8	1,352.4
Clothing & shoes	207.3	213.0	228.2	230.7	236.1	233.1	235.2	238.3
Food & beverages	604.8	621.4	633.7	631.7	647.8	648.2	654.1	660.2
Services	2,063.8	2,190.7	2,341.6	2,350.5	2,407.9	2,445.5	2,483.4	2,525.4
Gross private domestic investment	808.9	736.9	796.5	802.2	833.3	874.1	874.1	883.1
Fixed investment	802.0	745.5	789.1	792.5	821.3	839.5	861.0	876.0
Change in business inventories	6.9	-8.8	7.3	9.7	12.0	34.6	13.1	7.2
Net exports of goods & services	-71.4	-19.6	-29.6	-38.8	-38.8	-48.3	-65.1	-73.4
Government purchases of goods & services	1,047.4	1,099.3	1,131.8	1,139.1	1,143.8	1,139.7	1,158.6	1,165.5
1987 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross domestic product	4,897.3	4,881.4	4,988.3	4,998.2	5,068.3	5,078.2	5,102.1	5,135.8
Gross national product	4,916.5	4,874.5	4,994.0	5,006.4	5,068.4	5,080.7	5,104.1	5,140.5
Personal consumption expenditures	3,272.6	3,258.8	3,341.8	3,350.9	3,397.2	3,403.8	3,432.7	3,469.6
Durable goods	443.1	428.8	456.8	459.0	473.4	471.9	484.2	492.8
Nondurable goods	1,060.7	1,048.2	1,062.9	1,062.9	1,081.8	1,078.0	1,083.1	1,092.9
Clothing & shoes	186.2	184.7	193.7	195.4	200.0	194.8	197.8	200.8
Food & beverages	523.9	518.7	520.5	518.2	529.3	526.7	528.8	532.7
Services	1,768.8	1,783.8	1,822.3	1,829.0	1,842.0	1,855.9	1,865.4	1,883.9
Gross private domestic investment	748.8	875.7	732.9	739.6	763.0	803.0	803.8	811.9
Fixed investment	741.1	684.1	728.4	730.0	754.3	773.7	790.6	808.4
Change in business inventories	5.7	-8.4	6.5	9.6	8.7	29.3	13.0	6.5
Net exports of goods & services	-54.7	-19.1	-33.6	-42.5	-38.8	-59.9	-75.2	-87.3
Government purchases of goods & services	932.6	946.3	945.2	950.2	946.9	931.3	941.1	941.7
GDP implicit price deflator (% change)	4.4	3.9	2.9	1.0	3.3	3.6	2.3	1.8
Disposable personal income (\$ bil.)	4,050.5	4,230.5	4,500.2	4,497.0	4,657.6	4,597.5	4,692.2	4,720.6
Disposable per. income (1987 \$ bil.)	3,524.5	3,529.0	3,632.5	3,624.8	3,717.8	3,642.8	3,694.4	3,706.0
Per capita disposable per. income (\$)	18,205	18,741	17,815	17,577	18,153	17,878	18,196	18,254
Per capita dis. per. income (1987 \$)	14,101	13,965	14,219	14,169	14,490	14,163	14,326	14,330
U.S. population, total, incl. military abroad (mil.) *	249.9	252.7	255.5	255.7	256.5	257.1	257.7	258.5
Civilian population (mil.) *	247.8	250.5	253.5	253.8	254.6	255.3	255.9	256.7
	Annual			1992		1993		
	1990	1991	1992	Oct	July	Aug	Sept	Oct
Monthly data seasonally adjusted								
Industrial production (1987=100)	108.0	104.1	108.5	107.5	110.8	110.9	111.4	112.2
Leading economic indicators (1987=100)	98.4	97.1	98.1	98.0	97.9	98.4	98.8	99.1
Civilian employment (mil. persons)	117.9	118.9	117.6	117.7	119.3	119.7	119.5	119.9
Civilian unemployment rate (%)	5.5	6.7	7.4	7.4	6.8	6.7	6.7	6.8
Personal income (\$ bil. annual rate)	4,873.8	4,850.9	5,144.9	5,239.1	5,383.1	5,429.5	5,437.5	5,470.7
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,345.5	3,445.9	3,494.8	3,490.0	3,516.3	3,520.9	3,532.7	3,535.3
Three-month Treasury bill rate (%)	7.51	5.42	3.45	2.84	3.05	3.05	2.96	3.04
AAA corporate bond yield (Moody's) (%)	9.32	8.77	8.14	7.99	7.17	6.85	6.68	6.87
Housing starts (1,000) 2/	1,193	1,014	1,200	1,226	1,232	1,328	1,359	1,396
Auto sales at retail, total (mil.)	9.5	8.4	8.4	8.3	8.8	8.8	8.5	—
Business inventory/sales ratio	1.63	1.54	1.50	1.49	1.47	1.46	1.45	—
Sales of all retail stores (\$ bil.) 3/	1,849.8	1,865.8	1,956.5	1,870.0	1,734.0	1,746.0	1,747.0	1,773.0
Nondurable goods stores (\$ bil.)	1,178.8	1,211.8	1,257.3	1,063.0	1,082.0	1,083.0	1,092.0	1,101.0
Food stores (\$ bil.)	369.8	376.9	384.0	321.0	327.0	329.0	327.0	330.0
Eating & drinking places (\$ bil.)	191.0	196.9	201.9	172.0	175.0	179.0	181.0	183.0
Apparel & accessory stores (\$ bil.)	95.8	97.5	105.0	90.0	89.0	88.0	91.0	90.0

1/ Annual data as of December of the year listed. 2/ Private, including farm. 3/ Annual total. P.= preliminary. — = not available.
 Note: * Population estimates based on 1990 census.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—World Economic Growth

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 E	1993 F	1994 F	Average 1983-92
Percent change in real GDP													
World	2.7	4.3	3.3	2.7	3.1	4.4	3.3	2.2	0.7	2.0	1.7	2.5	2.8
World, less U.S.	2.5	3.6	3.4	2.7	3.1	4.6	3.6	2.8	1.5	1.7	1.2	2.2	3.0
Developed	2.8	4.3	3.2	2.7	3.1	4.4	3.3	2.4	0.9	1.7	1.0	2.0	2.9
Developed, less U.S.	2.2	3.4	3.3	2.8	3.2	4.7	3.7	3.3	2.1	1.2	0.0	1.3	3.0
United States	3.3	8.0	3.0	2.8	3.0	3.9	2.8	0.8	-0.7	2.6	2.8	3.2	2.8
Canada	3.2	8.4	4.7	3.3	4.1	4.7	2.5	0.4	-1.7	0.7	2.5	3.5	2.8
Japan	2.7	4.3	5.0	2.7	4.1	6.2	4.7	5.2	4.1	1.3	-0.5	1.0	4.0
Western Europe	1.6	2.4	2.5	2.7	2.6	3.7	3.2	2.8	0.2	0.8	-0.7	1.2	2.3
European Union	1.5	2.3	2.4	2.7	2.7	3.9	3.3	2.9	0.4	1.0	-0.8	1.1	2.3
Germany	1.5	2.8	1.9	2.2	1.4	3.7	3.3	2.9	0.6	1.5	-1.6	0.5	2.2
Central Europe	2.7	3.5	2.0	3.0	1.5	2.1	-0.3	-8.7	-13.8	-10.3	0.4	4.5	-1.8
Former Soviet Union	4.4	4.1	1.7	3.8	2.8	1.5	0.8	-5.8	-12.3	-17.9	-12.4	-6.8	-1.7
Developing	3.2	4.8	4.2	3.9	4.4	4.9	3.9	3.3	3.5	5.5	5.5	5.3	4.2
Asia	6.3	7.7	6.4	6.6	7.8	9.5	5.8	6.3	5.2	7.7	7.4	6.7	7.1
Pacific-Asia	8.9	9.4	6.7	7.3	9.0	9.5	6.1	6.6	6.4	9.0	8.2	7.1	7.9
China	10.1	14.4	12.3	8.2	11.0	10.7	4.3	5.4	6.4	12.8	12.3	7.8	8.6
South Asia	7.0	3.9	5.8	4.9	4.8	9.4	5.1	5.5	1.8	4.0	5.0	5.6	5.2
India	7.4	3.7	5.4	4.8	4.7	10.3	5.4	5.6	1.2	3.5	5.1	5.8	5.2
Latin America	-2.6	3.9	3.3	4.5	3.2	0.8	1.3	-0.1	3.1	2.2	3.3	3.8	1.9
Mexico	-4.2	3.7	2.7	-3.9	1.8	1.2	3.4	4.5	3.6	2.8	1.3	3.0	1.6
Caribbean/Central	0.2	0.5	2.2	2.1	2.8	-0.8	2.1	1.4	0.1	0.2	2.2	2.0	0.0
South America	-2.6	4.1	4.0	7.1	3.5	0.4	0.5	-1.7	3.0	1.9	3.9	4.3	2.0
Brazil	-3.4	5.4	7.9	8.0	3.3	-0.2	3.3	-4.2	1.2	-0.2	4.0	4.5	2.1
Middle East	3.3	2.6	1.5	-3.3	0.3	0.6	3.7	0.6	-0.8	7.5	6.1	4.6	1.6
Africa	1.2	1.0	3.0	2.4	0.4	2.7	3.0	1.9	2.2	1.8	2.1	2.9	2.0
North Africa	3.6	2.7	3.1	0.4	-0.1	1.3	2.9	1.8	2.8	1.0	1.8	3.2	1.6
Sub-Saharan	-0.4	-0.1	2.9	3.8	0.8	3.7	3.1	2.0	1.8	2.4	2.4	2.5	2.0
Mid-East & N. Africa	7.1	1.1	0.5	-4.7	-1.4	-1.1	2.8	2.8	2.2	5.6	4.9	4.2	1.5

E = estimate, F = forecast.

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Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1992		1993					
	1990	1991	1992	Nov	June	July	Aug	Sept	Oct R	Nov P	
1977 = 100											
Prices received											
All farm products	149	145	140	138	140	140	142	145	145	143	
All crops	127	129	121	115	112	118	123	128	130	128	
Food grains	123	115	139	133	113	114	118	123	130	138	
Feed grains & hay	123	117	118	104	110	113	115	113	118	130	
Feed grains	118	115	114	100	104	110	112	109	113	127	
Cotton	107	108	88	87	88	89	88	88	87	90	
Tobacco	152	161	154	164	141	141	143	155	157	162	
Oil-bearing crops	94	91	86	85	83	101	101	97	94	101	
Fruit, all	188	282	181	160	145	142	182	258	285	183	
Fresh market 1/	198	285	185	168	148	143	203	284	317	192	
Commercial vegetables	142	135	155	144	123	140	147	148	124	148	
Fresh market	144	140	167	143	118	143	152	152	122	151	
Potatoes & dry beans	189	141	124	127	154	184	144	131	131	148	
Livestock & products	170	181	157	156	166	161	162	160	159	157	
Meat animals	193	188	178	173	188	182	183	181	177	171	
Dairy products	141	128	135	135	135	132	129	131	135	138	
Poultry & eggs	131	124	117	127	129	124	130	126	128	129	
Prices paid											
Commodities & services											
Interest, taxes, & wage rates	184	189	191	191	197	197	197	197	199	199	
Production items	171	174	174	174	179	178	178	178	181	181	
Feed	128	123	123	—	—	124	—	—	127	—	
Feeder livestock	213	214	202	—	—	218	—	—	215	—	
Seed	165	163	162	—	—	169	—	—	169	—	
Fertilizer	131	134	131	—	—	129	—	—	127	—	
Agricultural chemicals	139	151	159	—	—	166	—	—	166	—	
Fuels & energy	204	203	199	—	—	198	—	—	203	—	
Farm & motor supplies	154	157	160	—	—	159	—	—	159	—	
Autos & trucks	231	244	258	—	—	275	—	—	276	—	
Tractors & self-propelled machinery	202	211	219	—	—	223	—	—	237	—	
Other machinery	216	226	233	—	—	245	—	—	248	—	
Building & fencing	144	146	150	—	—	156	—	—	158	—	
Farm services & cash rent	160	171	172	—	—	172	—	—	172	—	
Int. payable per acre on farm real estate debt	177	189	187	—	—	164	—	—	164	—	
Taxes payable per acre on farm real estate	158	164	171	—	—	176	—	—	178	—	
Wage rates (seasonally adjusted)	191	200	209	—	—	222	—	—	222	—	
Production items, interest, taxes, & wage rates	172	175	178	—	—	180	—	—	182	—	
Ratio, prices received to prices paid (%) 2/	81	77	73	71	71	71	72	74	73	72	
Prices received (1910-14=100)	831	685	637	623	639	639	651	661	662	654	
Prices paid, etc. (parity index) (1910-14=100)	1,267	1,298	1,317	—	—	1,358	—	—	1,366	—	
Parity ratio (1910-14=100) (%) 2/	54	51	49	—	—	47	—	—	48	—	

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = Preliminary. — = not available.

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Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1992	1993					
	1990	1991	1992	Nov	June	July	Aug	Sept	Oct R	Nov P
CROPS										
All wheat (\$/bu.)	2.61	3.00	3.24	3.29	2.84	2.85	2.95	3.11	3.22	3.36
Rice, rough (\$/cwt)	8.70	7.58	5.85	8.42	5.02	4.92	4.98	5.13	8.12	7.25
Corn (\$/bu.)	2.28	2.37	2.05	1.98	2.09	2.22	2.25	2.21	2.29	2.81
Sorghum (\$/cwt)	3.79	4.01	3.30	3.21	3.41	3.72	3.77	3.89	3.81	4.35
All hay, baled (\$/ton)	80.60	71.20	73.20	73.40	80.50	77.20	77.40	77.60	82.50	83.60
Soybeans (\$/bu.)	5.74	5.58	5.50	5.38	5.90	6.57	6.55	6.21	6.01	6.56
Cotton, upland (cts./lb.)	87.1	56.8	—	52.7	53.0	54.1	53.1	52.2	52.7	54.6
Potatoes (\$/cwt)	6.08	4.96	5.28	4.90	6.57	7.93	5.91	5.10	5.01	5.75
Lettuce (\$/cwt) 2/	11.50	11.40	12.40	9.50	11.50	18.90	15.20	16.90	12.20	11.10
Tomatoes fresh (\$/cwt) 2/	27.30	31.80	36.20	39.50	21.90	20.00	33.30	30.30	19.30	39.80
Onions (\$/cwt)	10.50	12.50	12.80	12.60	10.30	13.10	15.00	13.50	12.00	17.20
Dry edible beans (\$/cwt)	18.50	15.60	20.70	21.30	16.50	18.70	19.10	21.30	22.90	24.00
Apples for fresh use (cts./lb.)	20.9	25.1	19.2	19.3	16.1	18.0	23.1	26.5	22.4	20.5
Pears for fresh use (\$/ton)	360.00	385.00	378.00	433.00	538.00	401.00	353.00	400.00	391.00	361.00
Oranges, all uses (\$/box) 3/	8.13	6.78	5.79	3.31	3.89	4.10	5.44	10.52	11.87	5.25
Grapefruit, all uses (\$/box) 3/	5.66	5.55	6.25	4.66	0.98	0.14	2.44	3.51	8.13	4.19
LIVESTOCK										
Beef cattle (\$/cwt)	74.80	72.90	71.38	70.20	74.70	72.60	72.60	71.40	69.10	68.00
Calves (\$/cwt)	96.50	99.90	89.65	86.50	99.00	96.90	95.10	93.30	93.80	91.50
Hogs (\$/cwt)	54.00	48.80	41.88	41.10	48.20	45.90	47.50	47.80	47.00	43.60
Lambs (\$/cwt)	56.00	52.50	60.78	58.20	58.80	54.20	59.40	64.70	64.50	66.00
All milk, sold to plants (\$/cwt)	13.74	12.27	13.15	13.10	13.10	12.80	12.50	12.70	13.10	13.40
Milk, manuf. grade (\$/cwt)	12.34	11.05	11.91	12.00	11.90	11.30	11.00	11.90	12.40	12.50
Broilers (cts./lb.)	32.4	31.0	30.8	33.3	34.4	35.0	36.3	38.5	35.1	34.7
Eggs (cts./doz.) 4/	70.4	66.2	57.7	64.3	85.4	57.6	61.3	56.1	60.0	62.6
Turkeys (cts./lb.)	38.4	37.7	38.0	39.4	37.3	38.9	39.5	40.4	43.1	42.9
Wool (cts./lb.) 5/	80.0	55.0	74.0	60.0	55.1	48.6	38.8	37.8	51.6	50.6

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawaii. 3/ Equivalent on-tree returns.
 4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments.
 P = preliminary. R = revised. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1992	1993							
	1992	Nov	Apr	May	June	July	Aug	Sept	Oct	Nov
			1982-84=100							
Consumer Price Index, all items	140.3	142.0	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8
Consumer Price Index, less food	140.8	142.7	144.8	144.8	145.1	145.2	145.6	145.1	146.4	146.8
All food	137.9	138.3	140.6	141.1	140.4	140.3	140.8	141.1	141.6	141.9
Food away from home	140.7	141.5	142.7	142.9	143.2	143.4	143.6	143.8	144.0	144.2
Food at home	136.8	137.0	140.0	140.7	139.3	139.1	139.7	140.0	140.8	141.2
Meats 1/	130.7	131.2	133.8	134.7	134.9	135.5	135.6	135.5	135.9	136.3
Beef & veal	132.3	132.9	137.6	138.2	137.6	137.4	137.4	137.0	137.2	138.0
Pork	127.8	127.9	128.5	130.5	132.1	134.2	133.8	134.6	134.8	134.4
Poultry	131.4	133.6	135.2	136.6	136.5	136.0	137.5	138.0	139.2	139.7
Fish	151.7	151.2	159.7	154.7	154.8	153.2	154.1	155.4	157.4	158.9
Eggs	108.3	113.4	126.9	114.9	116.4	115.1	117.4	113.4	114.9	118.0
Dairy products 2/	128.6	129.4	128.0	128.0	129.8	130.2	130.5	129.6	129.5	129.5
Fats & oils 3/	129.8	128.6	130.2	129.4	130.1	130.4	130.1	130.0	130.0	129.2
Fresh fruit	184.2	181.4	184.6	188.0	176.1	178.7	184.7	193.3	197.7	194.4
Processed fruit	137.7	135.5	132.1	130.7	129.7	131.0	132.2	132.4	132.8	133.4
Fresh vegetables	157.9	158.4	179.3	189.8	167.1	155.8	156.1	157.4	157.7	166.1
Potatoes	141.5	136.0	152.0	156.0	163.4	165.2	165.8	156.1	152.1	158.3
Processed vegetables	128.8	127.7	130.4	129.9	130.9	131.2	131.4	130.9	131.7	131.7
Cereals & bakery products	151.5	152.7	155.4	156.3	156.7	157.2	157.5	157.7	158.1	157.9
Sugar & sweets	133.1	133.0	133.2	133.4	133.1	133.2	133.7	133.3	134.1	133.7
Beverages, nonalcoholic	114.3	112.4	114.2	115.0	114.6	114.4	114.1	113.8	115.4	115.4
Apparel										
Apparel, commodities less footwear	130.2	133.1	135.9	133.4	129.7	126.9	130.0	133.0	134.7	134.6
Footwear	125.0	128.0	127.1	127.8	125.6	123.9	123.5	126.2	127.3	127.4
Tobacco & smoking products	219.8	225.0	237.3	237.9	236.2	235.8	227.9	215.1	214.0	214.5
Beverages, alcoholic	147.3	148.2	149.7	149.5	149.6	149.6	149.7	149.9	150.1	150.0

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1992	1993					
	1990	1991	1992	Oct	May	June R	July	Aug	Sept	Oct
	1982 = 100									
All commodities	116.3	116.5	117.2	118.1	119.7	119.5	119.3	118.8	118.7	119.1
Finished goods 1/	119.2	121.7	123.2	124.4	125.8	125.5	125.3	124.3	123.9	124.7
All foods 2/	123.2	122.2	120.9	121.3	125.0	123.2	123.1	123.3	123.4	123.4
Consumer foods	124.4	124.1	123.3	123.8	126.9	125.4	125.0	125.4	125.6	125.5
Fresh fruit & melons	118.1	129.9	84.0	79.3	90.7	83.2	79.6	84.2	91.5	88.8
Fresh & dried vegetables	118.1	103.8	115.0	141.1	164.3	104.5	116.3	117.6	115.4	103.2
Dried fruit	108.7	111.8	114.8	114.7	118.2	118.5	117.1	119.4	117.9	121.1
Canned fruit & juice	127.0	128.6	134.5	132.1	124.7	124.7	125.7	126.1	126.3	125.8
Frozen fruit & juice	139.0	116.3	125.9	118.2	105.2	110.2	117.0	114.5	114.8	116.2
Fresh veg. excl. potatoes	107.8	100.2	116.4	149.0	164.3	80.7	98.4	110.5	115.2	89.5
Canned veg. & juices	118.7	112.9	109.5	109.1	110.0	109.9	110.9	109.5	110.9	112.0
Frozen vegetables	118.4	117.6	116.4	116.3	119.9	121.1	121.2	121.1	122.1	123.3
Potatoes	157.3	125.7	118.4	107.3	142.3	147.5	137.3	143.7	134.0	143.7
Eggs for fresh use (1991=100)	3/	3/	78.6	78.1	82.9	87.6	77.5	89.0	75.7	85.8
Bakery products	141.0	146.8	152.5	154.1	156.0	156.4	156.6	156.8	157.3	157.8
Meats	117.0	113.5	106.7	106.7	114.7	113.8	111.2	109.9	110.2	108.1
Beef & veal	118.0	112.2	109.5	109.0	120.5	118.4	112.5	110.9	110.5	105.9
Pork	119.8	113.4	98.9	99.9	107.2	109.8	107.4	105.8	108.0	108.9
Processed poultry	113.6	109.9	109.0	111.8	111.5	111.2	110.1	112.9	115.3	115.9
Fish	147.2	149.5	156.1	150.4	159.1	158.5	147.2	146.2	147.9	155.1
Dairy products	117.2	114.8	117.9	119.4	118.5	119.5	119.4	117.9	118.3	118.8
Processed fruits & vegetables	124.7	119.8	120.8	119.1	116.7	117.6	119.0	118.4	119.1	119.9
Shortening & cooking oil	123.2	116.5	115.1	113.3	120.1	119.3	127.9	128.0	128.5	128.4
Soft drinks	122.3	125.5	125.6	125.1	126.3	126.6	125.5	128.0	125.8	126.2
Consumer finished goods less foods	115.3	118.7	120.8	122.3	123.3	123.4	123.0	121.0	120.6	121.2
Beverages, alcoholic	117.2	123.7	126.1	125.5	126.5	125.7	125.7	126.0	125.7	125.9
Apparel	117.5	119.6	122.2	122.9	123.3	123.1	123.5	123.2	123.3	123.2
Footwear	125.6	128.8	132.0	132.4	134.1	134.2	134.5	134.8	135.0	134.7
Tobacco products	221.4	249.7	275.3	274.2	296.9	289.2	287.3	211.3	213.5	214.0
Intermediate materials 4/	114.5	114.4	114.7	115.4	116.2	116.7	116.6	116.8	116.8	116.8
Materials for food manufacturing	117.9	115.3	113.9	112.9	115.6	115.0	116.6	116.3	118.5	118.8
Flour	103.6	96.8	109.5	106.5	107.2	106.6	105.7	109.6	106.3	109.4
Refined sugar 5/	122.7	121.8	119.8	119.2	118.2	117.5	118.1	119.9	119.4	119.0
Crude vegetable oils	115.8	103.0	97.1	91.2	104.1	99.8	114.9	114.2	111.5	111.0
Crude materials 6/	108.9	101.2	100.4	101.9	106.5	104.2	102.7	101.6	101.0	102.2
Foodstuffs & feedstuffs	113.1	105.5	105.1	103.7	112.2	107.2	107.7	108.1	107.5	105.6
Fruits & vegetables & nuts 7/	117.5	114.7	96.9	105.2	120.8	93.9	97.2	99.5	101.5	94.4
Grains	97.4	92.0	87.3	87.8	91.1	85.3	91.2	93.9	92.2	96.4
Livestock	115.6	107.9	104.7	104.2	112.8	109.8	105.0	107.1	105.7	100.0
Poultry, live	118.8	111.2	112.6	119.3	132.3	118.9	124.4	125.9	135.1	126.1
Fibers, plant & animal	117.8	115.1	89.8	82.8	93.3	90.5	90.8	88.5	89.4	92.0
Fluid milk	100.8	89.5	96.1	98.1	95.9	96.5	96.6	93.3	93.1	94.9
Oilseeds	112.1	106.4	107.5	101.2	114.2	109.6	127.9	123.8	118.4	114.3
Tobacco, leaf	95.8	101.1	101.0	105.5	91.8	91.8	91.8	93.1	99.6	102.2
Sugar, raw cane	119.2	113.7	112.1	113.6	111.4	112.4	114.2	115.9	115.3	114.6

1/ Commodities ready for sale to ultimate consumer. 2/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). 3/ New index beginning Dec. 1991. 4/ Commodities requiring further processing to become finished goods. 5/ All types & sizes of refined sugar. 6/ Products entering market for the first time that have not been manufactured at that point. 7/ Fresh & dried. R = revised.

Information contact: Ann Duncan (202) 219-0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1992	1993					
	1990	1991	1992	Oct	May	June	July	Aug	Sept	Oct
Market basket 1/										
Retail cost (1982-84=100)	133.5	137.4	138.4	138.9	142.6	141.1	141.0	141.8	142.2	142.8
Farm value (1982-84=100)	113.1	108.1	103.4	104.0	108.9	105.0	104.2	103.8	104.9	102.2
Farm-retail spread (1982-84=100)	144.5	154.2	157.3	157.7	160.7	160.5	160.8	162.2	162.2	164.7
Farm value-retail cost (%)	29.7	27.0	26.2	26.2	26.8	26.1	25.9	25.6	25.8	25.1
Meat products										
Retail cost (1982-84=100)	128.5	132.5	130.7	131.1	134.7	134.9	135.5	135.8	135.5	135.9
Farm value (1982-84=100)	116.8	110.0	104.5	104.2	113.2	111.8	108.0	105.1	106.9	103.3
Farm-retail spread (1982-84=100)	140.4	155.6	157.5	158.7	158.8	163.7	166.9	166.9	164.9	169.3
Farm value-retail cost (%)	48.0	42.0	40.5	40.3	42.5	42.0	40.4	39.2	39.9	38.5
Dairy products										
Retail cost (1982-84=100)	128.5	125.1	128.5	130.1	128.0	129.8	130.2	130.5	129.8	129.5
Farm value (1982-84=100)	101.7	90.0	95.9	97.4	92.4	96.5	95.8	93.5	91.7	91.7
Farm-retail spread (1982-84=100)	149.5	157.5	158.8	160.2	160.8	160.5	162.1	164.6	164.5	164.3
Farm value-retail cost (%)	38.5	34.5	35.8	35.9	34.6	35.7	35.2	34.4	34.0	34.0
Poultry										
Retail cost (1982-84=100)	132.5	131.5	131.4	133.3	136.6	136.5	136.0	137.5	138.0	139.2
Farm value (1982-84=100)	107.8	102.5	104.0	107.9	115.4	111.3	113.7	117.5	118.5	118.0
Farm-retail spread (1982-84=100)	181.1	164.9	163.0	182.6	181.1	165.6	161.7	160.5	160.5	165.9
Farm value-retail cost (%)	43.5	41.7	42.4	43.3	45.2	43.6	44.7	45.7	46.0	44.8
Eggs										
Retail cost (1982-84=100)	124.1	121.2	108.3	109.3	114.9	118.4	115.1	117.4	113.4	114.9
Farm value (1982-84=100)	108.0	100.9	77.8	78.2	83.5	88.5	80.8	88.0	77.9	84.2
Farm-retail spread (1982-84=100)	153.2	157.6	163.2	165.2	171.3	166.5	176.7	170.2	177.2	170.0
Farm value-retail cost (%)	55.9	53.5	48.1	48.0	48.7	48.9	45.1	48.2	44.1	47.1
Cereal & bakery products										
Retail cost (1982-84=100)	140.0	145.8	151.5	152.8	158.3	156.7	157.2	157.5	157.7	158.1
Farm value (1982-84=100)	90.5	85.3	94.7	89.7	88.0	83.5	85.5	88.1	87.7	91.1
Farm-retail spread (1982-84=100)	146.9	154.3	159.4	161.8	165.8	166.9	167.2	167.2	167.5	167.4
Farm value-retail cost (%)	7.9	7.2	7.7	7.2	6.9	6.5	6.7	6.8	6.8	7.1
Fresh fruits										
Retail cost (1982-84=100)	174.6	200.1	189.6	188.0	193.1	180.9	183.5	192.1	203.7	208.1
Farm value (1982-84=100)	128.3	174.4	122.5	117.1	132.8	133.4	121.2	134.2	151.1	140.0
Farm-retail spread (1982-84=100)	195.9	211.9	220.6	220.8	220.9	202.8	212.3	218.8	228.0	239.5
Farm value-retail cost (%)	23.2	27.5	20.4	19.7	21.7	23.3	20.9	22.1	23.4	21.3
Fresh vegetables										
Retail cost (1982-84=100)	151.1	154.4	157.9	155.2	189.8	187.1	155.8	156.1	157.4	157.7
Farm value (1982-84=100)	124.4	110.8	120.5	133.2	173.3	107.3	109.4	112.4	120.5	100.5
Farm-retail spread (1982-84=100)	164.9	178.8	177.2	166.5	198.0	197.8	179.7	178.5	178.4	187.1
Farm value-retail cost (%)	28.0	24.4	25.9	29.1	31.0	21.8	23.8	24.5	26.0	21.8
Processed fruits & vegetables										
Retail cost (1982-84=100)	132.7	130.2	133.7	133.1	130.2	130.0	131.0	131.7	131.6	132.2
Farm value (1982-84=100)	144.0	120.6	129.0	127.0	102.2	101.4	103.8	103.7	103.9	104.8
Farm-retail spread (1982-84=100)	129.1	133.2	135.2	135.0	138.9	138.9	139.5	140.4	140.3	140.8
Farm value-retail cost (%)	25.8	22.0	22.9	22.7	18.7	18.6	18.8	18.7	18.8	18.8
Fats & oils										
Retail cost (1982-84=100)	126.3	131.7	129.8	129.9	129.4	130.1	130.4	130.1	130.0	130.0
Farm value (1982-84=100)	107.1	98.0	93.2	90.0	101.1	101.6	114.3	107.8	109.9	106.8
Farm-retail spread (1982-84=100)	133.4	144.2	143.3	144.8	139.8	140.8	136.3	138.3	137.4	138.9
Farm value-retail cost (%)	22.8	20.0	19.3	18.6	21.0	21.0	23.6	22.3	22.7	22.1
	Annual			1992	1993					
	1990	1991	1992	Nov	June	July	Aug	Sept	Oct	Nov
Beef, Choice										
Retail price 2/ (cts./lb.)	281.0	288.3	284.6	287.1	297.9	296.7	290.9	288.4	288.5	291.0
Wholesale value 3/ (csts.)	189.6	182.5	179.6	177.1	185.2	175.9	179.4	178.3	171.6	174.2
Net farm value 4/ (csts.)	168.4	160.2	161.8	159.5	165.8	157.6	160.1	158.2	151.0	152.1
Farm-retail spread (csts.)	112.6	128.1	122.8	127.6	132.1	139.1	130.8	132.2	137.5	138.9
Wholesale-retail 5/ (csts.)	91.4	105.8	105.0	110.0	112.7	120.8	111.5	112.1	118.9	116.8
Farm-wholesale 6/ (csts.)	21.2	22.3	17.8	17.6	19.4	18.3	19.3	20.1	20.6	22.1
Farm value-retail price (%)	60	56	57	56	56	53	55	54	52	52
Pork										
Retail price 2/ (csts./lb.)	212.6	211.9	198.0	196.4	196.5	200.2	198.7	201.6	201.2	202.1
Wholesale value 3/ (csts.)	118.3	108.9	98.9	96.9	105.7	102.8	105.8	105.5	106.5	103.7
Net farm value 4/ (csts.)	87.2	78.4	67.8	66.0	77.0	73.6	76.9	77.0	75.0	68.2
Farm-retail spread (csts.)	125.4	133.5	130.2	130.4	119.5	126.6	121.8	124.6	126.2	133.9
Wholesale-retail 5/ (csts.)	94.3	103.0	99.1	99.5	90.8	97.4	92.9	96.1	94.7	98.4
Farm-wholesale 6/ (csts.)	31.1	30.5	31.1	30.9	28.7	29.2	28.9	28.5	31.5	35.5
Farm value-retail price (%)	41	37	34	34	39	37	39	38	37	34

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, & in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

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Table 9.—Price Indexes of Food Marketing Costs

(See the December 1993 issue.)

Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/							Pounds		
Beef									
1991	397	22,917	2,406	25,720	1,188	419	24,113	66.8	74.28
1992	419	23,088	2,440	25,945	1,324	360	24,261	66.5	75.36
1993 F	360	23,166	2,410	25,936	1,285	425	24,226	65.7	76-77
1994 F	425	23,993	2,370	26,788	1,410	350	25,028	67.2	71-77
Pork									
1991	296	15,999	775	17,070	283	388	16,399	50.4	49.69
1992	388	17,234	845	18,267	407	385	17,475	53.1	43.03
1993 F	385	16,995	710	18,090	412	375	17,303	52.0	46-47
1994 F	375	16,949	725	18,049	400	375	17,274	51.4	44-50
Veal 5/									
1991	6	306	0	312	0	7	305	1.0	99.94
1992	7	310	0	317	0	5	312	1.0	89.38
1993 F	5	284	0	286	0	4	280	0.9	95-96
1994 F	5	282	0	286	0	5	277	0.9	90-96
Lamb & mutton									
1991	8	383	41	412	10	8	396	1.4	53.21
1992	8	348	50	404	8	8	388	1.4	61.00
1993 F	8	335	50	393	9	10	374	1.3	65-66
1994 F	10	341	50	401	8	9	384	1.3	61-67
Total red meat									
1991	707	39,585	3,223	43,515	1,481	820	41,214	119.6	—
1992	820	40,978	3,135	44,933	1,739	758	42,436	121.9	—
1993 F	758	40,775	3,170	44,703	1,706	814	42,183	119.9	—
1994 F	814	41,561	3,145	45,520	1,818	739	42,963	120.7	—
Broilers									
1991	26	19,591	0	19,617	1,261	36	18,320	63.7	54.8
1992	38	20,904	0	20,940	1,489	33	19,418	66.8	52.6
1993 F	33	22,012	0	22,045	1,860	33	20,153	68.6	54-55
1994 F	33	23,196	0	23,229	1,905	33	21,291	71.7	50-56
Mature chicken									
1991	224	608	0	732	28	274	429	1.7	—
1992	274	520	0	794	41	345	408	1.6	—
1993 F	345	510	0	855	59	325	472	1.8	—
1994 F	325	517	0	842	64	340	438	1.7	—
Turkeys									
1991	306	4,603	0	4,909	103	264	4,541	18.0	61.3
1992	264	4,777	0	5,041	171	272	4,599	18.0	60.2
1993 F	272	4,797	0	5,068	228	260	4,581	17.7	62-63
1994 F	260	4,901	0	5,161	195	275	4,691	18.0	59-65
Total poultry									
1991	557	24,701	0	25,258	1,392	575	23,291	83.4	—
1992	575	26,201	0	26,775	1,701	650	24,425	86.4	—
1993 F	650	27,319	0	27,969	2,146	618	25,205	88.2	—
1994 F	618	28,614	0	29,232	2,184	648	26,420	91.4	—
Red meat & poultry									
1991	1,264	64,286	3,223	68,772	2,873	1,395	64,504	202.9	—
1992	1,395	67,179	3,135	71,708	3,440	1,408	68,861	208.3	—
1993 F	1,408	68,094	3,170	72,671	3,852	1,432	67,388	208.0	—
1994 F	1,432	70,175	3,145	74,752	3,982	1,387	69,383	212.2	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was 70.5). 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100-1,300 lb.; pork: barrows & gilts, lows, Southern Minnesota; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Hatch- ing use	Ending stocks	Consumption		
								Total	Per capita	Wholesale price*
									No.	Cts./doz
Million dozen										
1987	10.4	5,868.2	5.8	5,884.2	111.2	599.1	14.4	5,159.5	254.9	81.6
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	246.9	82.1
1989	15.2	5,598.2	25.2	5,638.5	91.8	643.9	10.7	4,892.4	237.3	81.9
1990	10.7	5,665.8	8.1	5,685.3	100.5	678.5	11.8	4,894.7	235.0	82.2
1991	11.8	5,779.3	2.3	5,793.3	154.3	708.1	13.0	4,917.9	233.5	77.5
1992	13.0	5,882.7	4.3	5,899.8	157.0	728.4	13.5	5,001.0	235.0	85.4
1993 F	13.5	5,851.3	5.0	5,969.8	158.8	760.1	12.0	5,039.0	234.2	72-73
1994 F	12.0	6,015.0	4.5	6,031.5	180.0	780.0	12.0	5,078.5	233.7	66-72

¹ Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use^{1/}

	Production	Farm use	Commercial			Total commercial supply	CCC net removals	Commercial		All milk price 1/	CCC net removals	
			Farm marketings	Beg. stock	Imports			Ending stocks	Disappearance		Skim solids basis	Total solids basis 2/
			Billion pounds (milkfat basis)									Billion pounds
1985	143.0	2.5	140.8	4.8	2.8	148.2	13.3	4.5	130.4	12.78	17.2	15.6
1986	143.1	2.4	140.7	4.5	2.7	147.9	10.8	4.1	133.0	12.51	14.3	12.9
1987	142.7	2.3	140.5	4.1	2.5	147.1	8.8	4.6	135.7	12.54	9.3	8.3
1988	145.2	2.2	142.9	4.6	2.4	149.9	9.1	4.3	136.5	12.28	5.5	5.9
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.4	13.58	0.4	4.0
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	138.9	13.68	1.8	4.8
1991	148.5	2.0	146.5	5.1	2.6	154.3	10.4	4.5	139.4	12.24	3.9	6.5
1992	151.7	1.9	149.8	4.6	2.5	156.7	10.1	4.7	142.0	13.09	2.4	5.4
1993 F	151.9	1.9	150.0	4.7	2.8	157.3	7.4	4.5	145.4	12.80	4.9	5.9

1/ Delivered to plants & dealers; does not reflect deductions. 2/ Arbitrarily weighted average of milkfat basis (40 percent) & skim solids basis (60 percent). F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual			1992		1993				
	1990	1991	1992	Oct	May	June	July	Aug	Sept	Oct
Broilers										
Federally inspected slaughter, certified (mil. lb.)	18,555.0	19,727.7	21,052.4	1,834.0	1,786.8	1,979.4	1,801.8	1,905.5	1,913.3	1,888.4
Wholesale price, 12-city (cts./lb.)	54.8	52.0	52.8	53.7	57.9	55.0	55.4	57.8	57.8	65.7
Price of grower feed (\$/ton)	218	208	208	207	210	208	206	202	203	219
Broiler-feed price ratio 1/	3.0	3.0	3.1	3.2	3.4	3.3	3.4	3.6	3.8	3.2
Stocks beginning of period (mil. lb.)	38.3	26.1	38.1	31.1	32.8	38.3	40.7	37.1	33.3	38.2
Broiler-type chicks hatched (mil.) 2/	6,324.4	6,618.5	6,830.9	547.0	824.3	610.7	614.3	607.9	578.8	580.0
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	4,580.7	4,651.9	4,828.9	467.8	378.7	446.7	419.3	428.9	436.0	451.4
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	83.2	81.3	80.2	83.9	58.8	58.4	59.8	63.4	66.7	71.3
Price of turkey grower feed (\$/ton)	238	230	242	241	246	249	251	247	245	254
Turkey-feed price ratio 1/	3.2	3.3	3.1	3.2	3.1	3.0	3.1	3.2	3.3	3.4
Stocks beginning of period (mil. lb.)	235.9	306.4	264.1	734.4	424.4	474.0	556.1	825.3	678.8	713.8
Poults placed in U.S. (mil.)	304.9	308.1	307.8	21.9	27.9	28.4	28.6	26.2	21.3	21.0
Eggs										
Farm production (mil.)	67,987	69,352	70,592	8,010	5,998	6,805	5,981	5,999	5,867	6,145
Average number of layers (mil.)	270	275	278	279	280	280	281	281	283	285
Rate of lay (eggs per layer on farms)	251.7	252.4	253.9	21.5	21.4	20.7	21.3	21.3	20.7	21.8
Cartoned price, New York, grade A large (cts./doz.) 3/	82.2	77.5	65.4	65.3	67.8	74.7	68.9	72.8	87.2	70.9
Price of laying feed (\$/ton)	200	192	199	196	200	201	202	201	200	207
Egg-feed price ratio 1/	7.0	8.8	5.7	5.8	6.3	6.5	5.7	6.1	5.8	5.8
Stocks, first of month										
Shell (mil. doz.)	0.38	0.45	0.63	0.66	0.18	0.18	0.21	0.16	0.18	0.45
Frozen (mil. doz.)	10.3	11.2	12.3	15.2	10.9	11.8	11.5	13.4	13.8	10.9
Replacement chicks hatched (mil.)	398	420	388	32.0	37.1	36.1	34.2	32.8	31.9	32.2

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1992	1993					
	1990	1991	1992	Oct	May	June	July	Aug	Sept	Oct
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.21	11.05	11.88	12.05	12.52	12.03	11.42	11.17	11.90	12.46
Wholesale prices										
Butter, grade A Chl. (cts./lb.)	102.1	99.3	82.5	82.2	75.3	76.2	73.5	74.8	74.3	74.2
Am. cheese, Wis. assembly pt. (cts./lb.)	136.7	124.4	131.9	132.4	141.8	133.7	126.3	124.8	137.4	138.9
Nonfat dry milk (cts./lb.) 2/	100.6	94.0	107.1	108.0	115.3	112.9	109.8	109.3	109.2	110.8
USDA net removals 3/										
Total milk equiv. (mil. lb.) 4/	9,017.2	10,425.9	9,978.3	326.5	1,186.3	717.4	278.3	-69.3	-459.9	4.6
Butter (mil. lb.)	400.3	442.8	439.9	13.7	52.1	31.1	11.3	-4.6	-22.4	-1.0
Am. cheese (mil. lb.)	21.5	78.9	15.7	0.8	1.2	0.9	0.9	0.7	0.7	0.6
Nonfat dry milk (mil. lb.)	117.8	269.5	142.6	26.5	21.1	18.5	25.8	31.2	28.1	32.3
Milk										
Milk prod. 21 States (mil. lb.)	125,772	125,671	128,300	10,532	11,443	11,024	10,948	10,572	10,160	10,385
Milk per cow (lb.)	14,778	14,977	15,546	1,278	1,404	1,354	1,346	1,302	1,253	1,283
Number of milk cows (1,000)	8,512	8,391	8,253	8,238	8,148	8,144	8,134	8,120	8,110	8,095
U.S. milk production (mil. lb.)	148,314	148,477	151,747	7/ 12,476	7/ 13,563	7/ 13,068	7/ 12,965	7/ 12,520	7/ 12,029	7/ 12,302
Stock, beginning										
Total (mil. lb.)	9,036	13,359	15,841	17,921	17,393	18,098	19,107	17,838	15,649	13,840
Commercial (mil. lb.)	4,120	5,146	4,461	4,976	4,563	4,927	5,346	5,375	5,275	4,982
Government (mil. lb.)	4,916	8,213	11,379	12,945	12,830	13,171	13,761	12,261	10,374	8,858
Imports, total (mil. lb.)	2,690	2,625	2,524	226	244	212	235	190	224	—
Commercial disappearance (mil. lb.)	138,922	139,343	142,143	12,438	12,094	11,985	12,730	12,716	12,849	—
Butter										
Production (mil. lb.)	1,302.2	1,338.8	1,365.2	101.6	115.1	103.9	87.2	79.3	80.4	92.1
Stocks, beginning (mil. lb.)	256.2	416.1	539.4	608.5	585.2	582.3	589.3	534.0	454.8	388.8
Commercial disappearance (mil. lb.)	915.2	903.5	943.7	89.9	58.8	80.9	72.5	83.2	108.8	—
American cheese										
Production (mil. lb.)	2,894.2	2,768.9	2,938.6	237.9	277.7	268.2	259.5	237.8	219.5	239.0
Stocks, beginning (mil. lb.)	236.2	347.4	318.7	350.5	330.1	353.0	413.8	408.9	396.7	389.8 ¹
Commercial disappearance (mil. lb.)	2,784.4	2,756.7	2,901.1	257.1	250.2	206.9	261.9	249.7	219.4	—
Other cheese										
Production (mil. lb.)	3,167.0	3,250.0	3,551.7	320.3	294.0	288.7	281.2	292.2	303.0	317.1
Stocks, beginning (mil. lb.)	93.2	110.8	97.5	121.1	131.6	131.7	131.4	126.0	122.3	111.3
Commercial disappearance (mil. lb.)	3,428.4	3,539.2	3,795.4	344.4	320.2	311.3	312.0	315.8	339.2	—
Nonfat dry milk										
Production (mil. lb.)	879.2	877.5	872.1	53.3	103.6	95.2	88.4	64.9	51.1	56.3
Stocks, beginning (mil. lb.)	49.5	161.9	214.8	112.0	87.3	113.0	143.6	130.4	133.8	100.0
Commercial disappearance (mil. lb.)	697.6	682.7	714.8	40.5	56.1	46.2	75.7	31.1	61.0	—
Frozen dessert										
Production (mil. gal.) 5/	1,174.6	1,203.1	1,198.8	88.7	110.5	124.4	124.6	117.8	100.0	85.0
	Annual			1992				1993		
	1990	1991	1992	I	II	III	IV	I P	II P	III P
Milk production (mil. lb.)	148,314	148,477	151,747	37,989	39,077	37,515	37,166	37,763	39,614	37,514
Milk per cow (lb.)	14,842	14,860	15,423	3,852	3,971	3,818	3,782	3,862	4,068	3,863
No. of milk cows (1,000)	10,127	9,992	9,839	9,863	9,841	9,826	9,827	9,777	9,739	9,710
Milk-feed price ratio 6/	1.71	1.58	1.69	1.68	1.65	1.75	1.69	1.61	1.68	1.62
Return over concentrate costs (\$/cwt milk) 8/	10.17	8.95	9.74	9.60	9.50	10.10	9.75	9.01	9.57	9.28

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Includes products exported through the Dairy Export Incentive Program (DEIP). 4/ Milk equivalent, fat basis. 5/ Hard ice cream, ice milk, & hard sherbet. 6/ Based on average milk price after adjustment for price support deductions. 7/ Estimated. — = not available. P = preliminary.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1992			1993		
	1990	1991	1992	II	III	IV	I	II	III
U.S. wool price, (cts./lb.) 1/	256	199	204	222	210	176	146	134	136
Imported wool price, (cts./lb.) 2/	287	187	210	233	203	189	150	137	128
U.S. mill consumption, scoured									
Apparel wool (1,000 lb.)	120,822	137,187	139,715	36,045	34,462	32,279	35,503	34,462	34,403
Carpet wool (1,000 lb.)	12,124	14,352	14,726	3,823	3,145	3,378	4,511	4,341	2,648

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type B4A (24 micron). Duty since 1982 has been 10.0 cents. — = not available. P = preliminary.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1992	1993					
	1990	1991	1992	Oct	May	June	July	Aug	Sept	Oct
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,378	8,992	8,397	7,495	8,339	8,343	7,923	7,653	7,754	8,214
Placed on feed (1,000 head)	21,030	19,704	20,498	2,658	1,781	1,410	1,483	1,845	2,148	2,474
Marketings (1,000 head)	19,198	19,066	18,623	1,493	1,646	1,723	1,672	1,867	1,622	1,536
Other disappearance (1,000 head)	1,218	1,233	1,199	76	131	197	81	77	66	76
Beef steer-corn price ratio, Omaha 2/	32.8	31.6	33.3	29.6	37.5	36.8	31.4	32.8	32.0	29.6
Hog-corn price ratio, Omaha 2/	23.1	21.1	19.0	20.1	21.7	23.2	20.1	21.7	21.6	20.1
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha 1,000-1,100 lb.	77.40	73.83	74.66	74.13	80.97	76.13	72.22	73.28	71.46	69.78
Choice steers, Neb. Direct, 1,100-1,300 lb.	78.56	74.28	75.36	75.12	80.39	76.70	73.60	74.59	73.11	71.14
Boning utility cows, Sioux Falls	53.60	50.31	44.84	45.69	49.00	49.44	50.28	49.61	47.97	46
Feeder cattle										
Medium no. 1, Oklahoma City 600-700 lb.	92.15	92.74	85.57	85.23	93.76	96.33	92.96	92.58	91.23	88.11
Slaughter hogs										
Barrows & gilts, Iowa, S. Minn.	55.32	49.69	43.05	42.69	47.69	48.98	46.71	48.63	48.80	47.64
Feeder pigs										
S. Mo. 40-50 lb. (per head)	51.46	39.84	31.71	32.44	43.88	38.65	36.69	36.13	39.78	42.22
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	55.54	53.21	61.00	52.81	62.50	57.75	57.00	58.97	66.08	63.75
Ewes, Good, San Angelo	35.21	31.98	35.39	29.58	36.29	38.00	38.17	35.39	34.84	30.82
Feeder lambs										
Choice, San Angelo	62.95	53.54	62.09	52.94	62.50	59.80	58.58	63.17	68.75	69.96
Wholesale meat prices, Midwest										
Boxed beef cut-out value	123.21	118.31	116.73	115.51	127.19	120.52	114.48	116.73	114.65	111.52
Canner & cutter cow beef	99.96	99.42	93.85	90.85	95.90	96.66	101.69	98.60	94.72	90.02
Pork loins, 14-18 lb. 3/	117.52	108.39	101.41	98.98	111.16	122.28	113.40	116.73	116.74	111.85
Pork bellies, 12-14 lb.	53.80	47.79	30.39	29.13	39.86	36.24	44.51	46.68	43.82	47.25
Hams, skinned, 17-20 lb.	64.87	75.88	67.42	76.58	63.09	63.59	64.94	66.96	75.08	76.34
All fresh beef retail price 4/	262.48	271.05	288.87	287.75	276.90	274.03	274.99	273.00	270.84	273.36
Commercial slaughter (1,000 head) 5/										
Cattle	33,241	32,690	32,673	2,864	2,775	3,013	2,864	2,941	2,870	2,797
Steers	16,587	16,728	17,135	1,433	1,504	1,811	1,494	1,564	1,477	1,402
Helfers	10,090	9,725	9,238	802	766	888	844	820	816	805
Cows	5,920	5,623	5,848	565	452	473	468	495	517	531
Bulls & stags	844	614	653	84	53	61	58	62	60	59
Calves	1,789	1,436	1,371	114	85	94	93	98	97	97
Sheep & lambs	5,654	5,722	5,493	470	411	478	409	432	426	406
Hogs	85,138	88,169	94,888	8,792	7,145	7,507	7,177	7,637	7,946	8,039
Commercial production (mil. lb.)										
Beef	22,634	22,600	22,968	2,015	1,857	2,051	1,983	2,065	2,027	1,980
Veal	316	296	299	24	20	22	22	23	22	22
Lamb & mutton	358	358	343	29	27	31	26	27	27	25
Pork	15,300	15,948	17,185	1,588	1,309	1,377	1,311	1,389	1,438	1,473

	Annual			1992			1993			
	1990	1991	1992	II	III	IV	I	II	III	IV
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	9,943	10,827	10,135	9,693	8,847	8,920	10,884	10,452	9,493	9,691
Placed on feed (1,000 head)	24,803	23,208	24,246	5,273	6,107	7,458	5,321	5,284	6,301	—
Marketings (1,000 head)	22,526	22,383	22,061	5,675	5,768	5,179	5,314	5,783	* 5,950	—
Other disappearance (1,000 head)	1,393	1,517	1,438	444	268	320	439	460	—	—
Hogs & pigs (10 States) 6/										
Inventory (1,000 head) 1/	42,200	42,900	45,735	44,800	47,255	49,175	47,140	45,580	46,420	46,920
Breeding (1,000 head) 1/	5,275	5,257	5,610	5,555	5,845	5,840	5,735	5,520	5,630	5,560
Market (1,000 head) 1/	36,925	37,643	40,125	39,245	41,410	43,335	41,405	40,060	40,790	41,360
Farrowings (1,000 head)	8,960	9,516	10,202	2,663	2,501	2,398	2,210	2,471	2,302	* 2,331
Pig crop (1,000 head)	70,589	75,330	82,497	21,570	20,395	19,351	18,093	20,065	18,610	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb; beginning 1986, 14-18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Classes estimated. 6/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), & Sept.-Nov. (IV). May not add to NASS totals due to rounding. — = not available. * Intentions.

Information contact: Polly Cochran (202) 219-0767.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply ^{4/}	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price ^{5/}
	Set aside ^{3/}	Planted	Harvested									
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Wheat												
1988/89	22.5	65.5	53.2	34.1	1,812	3,096	150	829	1,415	2,394	702	3.72
1989/90	9.6	78.6	62.2	32.7	2,037	2,762	144	848	1,232	2,225	538	3.72
1990/91	7.5	77.2	69.3	39.5	2,736	3,309	499	875	1,666	2,443	866	2.61
1991/92*	15.9	69.9	57.7	34.3	1,981	2,888	254	883	1,280	2,418	472	3.00
1992/93*	7.3	72.3	62.4	39.4	2,459	3,001	195	922	1,354	2,472	529	3.24
1993/94*	6.0	72.1	63.0	38.4	2,422	3,036	300	929	1,175	2,394	642	3.00-3.20
	Mil. acres			Lb./acre				Mil. cwt (rough equiv.)				\$/cwt
Rice												
1988/89	1.09	2.93	2.90	5,514	159.9	195.1	—	6/ 82.5	85.9	168.4	28.7	6.83
1989/90	1.18	2.73	2.89	5,749	154.5	185.6	—	6/ 82.1	77.2	159.3	28.4	7.35
1990/91	1.02	2.90	2.82	5,529	158.1	187.2	—	6/ 91.7	70.9	162.7	24.8	6.70
1991/92*	0.9	2.88	2.78	5,674	157.5	187.3	—	6/ 83.7	68.4	159.9	27.4	7.58
1992/93*	0.4	3.17	3.13	6,722	179.1	212.6	—	6/ 98.1	77.0	173.2	39.4	5.90
1993/94*	0.6	3.02	2.94	6,511	162.0	208.2	—	6/ 99.5	85.0	184.5	23.7	8.00-9.50
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Corn												
1988/89	20.6	87.7	58.3	84.0	4,929	9,191	3,941	1,293	2,928	7,260	1,930	2.54
1989/90	10.8	72.2	64.7	116.3	7,525	9,458	4,389	1,356	2,368	6,113	1,344	2.36
1990/91	10.7	74.2	67.0	116.5	7,934	9,282	4,663	1,373	1,725	7,761	1,521	2.28
1991/92*	7.4	78.0	68.8	108.6	7,475	9,016	4,878	1,454	1,584	7,918	1,100	2.37
1992/93*	5.3	79.3	72.1	131.4	9,479	10,585	5,288	1,610	1,675	8,473	2,113	2.07
1993/94*	9.0	73.7	63.1	103.1	8,503	8,636	4,850	1,550	1,350	7,750	888	2.46-2.75
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Sorghum												
1988/89	3.9	19.3	9.0	63.8	577	1,239	468	22	311	800	440	2.27
1989/90	3.3	12.6	11.1	55.4	615	1,055	517	15	303	835	220	2.10
1990/91	3.3	10.5	9.1	63.1	573	763	410	9	232	651	143	2.12
1991/92*	2.5	11.1	9.9	59.3	585	727	374	6	292	674	53	2.25
1992/93*	2.0	13.3	12.2	72.8	884	937	489	8	276	762	175	1.89
1993/94*	2.0	10.7	9.7	63.6	620	795	510	8	200	718	78	2.25-2.55
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Barley												
1988/89	2.8	9.8	7.6	38.0	290	622	171	175	79	425	166	2.80
1989/90	2.3	9.1	6.3	48.6	404	614	193	175	84	453	181	2.42
1990/91	2.9	8.2	7.5	56.1	422	596	205	176	81	481	135	2.14
1991/92*	2.2	8.9	8.4	55.2	464	624	230	171	94	496	129	2.10
1992/93*	2.3	7.8	7.3	62.5	458	598	200	167	80	447	151	2.05
1993/94*	2.2	7.9	7.1	58.9	416	602	235	165	85	465	117	1.95-2.05
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Oats												
1988/89	0.3	13.9	5.5	39.3	218	392	194	100	1	294	98	2.61
1989/90	0.4	12.1	6.9	54.3	374	536	266	115	1	381	157	1.49
1990/91	0.2	10.4	5.9	60.1	358	578	286	120	1	407	171	1.14
1991/92*	0.6	8.7	4.8	60.7	243	488	235	125	2	362	128	1.20
1992/93*	0.7	8.0	4.5	65.6	295	477	233	125	5	364	113	1.32
1993/94*	0.8	7.8	3.8	54.6	268	401	160	125	5	319	91	1.35-1.45
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Soybeans												
1988/89	0	58.8	57.4	27.0	1,549	1,855	7/ 88	1,058	527	1,673	182	7.42
1989/90	0	60.8	58.6	32.3	1,824	2,109	7/ 101	1,148	623	1,870	239	5.89
1990/91	0	57.8	56.6	34.1	1,926	2,188	7/ 95	1,187	557	1,839	329	5.74
1991/92*	0	59.2	58.0	34.2	1,887	2,319	7/ 103	1,254	684	2,041	278	5.58
1992/93*	0	59.3	58.2	37.6	2,186	2,468	7/ 122	1,279	770	2,178	292	5.80
1993/94*	0	59.5	56.0	32.7	1,834	2,131	7/ 111	1,225	625	1,968	165	6.00-7.00
	Mil. lbs											\$/Ctn./lb.
Soybean oil												
1988/89	—	—	—	—	11,737	13,987	—	10,591	1,681	12,252	1,715	21.10
1989/90	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91	—	—	—	—	13,408	14,730	—	12,164	780	12,944	1,786	21.00
1991/92*	—	—	—	—	14,345	16,132	—	12,245	1,648	13,893	2,238	19.10
1992/93*	—	—	—	—	13,779	16,020	—	12,949	1,500	14,449	1,571	21.40
1993/94*	—	—	—	—	13,775	15,365	—	13,000	1,350	14,350	1,015	24.0-27.5
	1,000 tons											\$/Ton
Soybean meal												
1988/89	—	—	—	—	24,943	25,100	—	18,657	5,270	24,927	173	252.4
1989/90	—	—	—	—	27,719	27,900	—	22,263	6,319	27,582	318	186.5
1990/91	—	—	—	—	28,325	28,688	—	22,934	5,489	28,403	285	181.4
1991/92*	—	—	—	—	29,831	30,183	—	23,008	6,945	29,953	230	189.2
1992/93*	—	—	—	—	30,364	30,688	—	24,160	6,325	30,485	204	194.0
1993/94*	—	—	—	—	29,146	28,450	—	24,250	4,900	29,150	300	185-220

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area											
	Set Aside 3/	Planted	Harves- ted	Yield	Produc- tion	Total supply 4/	Feed and resid- ual	Other domes- tic use	Ex- ports	Total use	Ending Stocks	Farm Price 5/
	Mil. acres			Lb./acre				Mil. bales				Cts./lb.
Cotton 10/												
1988/89	2.2	12.5	11.9	819	15.4	21.2	—	7.8	6.1	13.9	7.1	56.60
1989/90	3.5	10.6	9.5	814	12.2	19.3	—	8.8	7.7	16.5	3.0	66.20
1990/91	2.0	12.3	11.7	834	15.5	18.5	—	8.7	7.8	16.5	2.9	67.10
1991/92*	1.2	14.1	13.0	852	17.8	20.0	—	9.6	6.7	16.3	3.7	58.10
1992/93*	1.7	13.2	11.1	699	18.2	19.9	—	10.3	5.2	15.5	4.7 11/	54.60
1993/94*	1.4	13.7	13.2	594	16.3	21.0	—	10.3	5.8	16.2	4.8 12/	

*December 9, 1993 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soybean meal & soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acre, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, & 4.58 480-pound bales of cotton. 3/ Includes diversion, acreage reduction, 50-92, & 0-92 programs. 0/92 & 50/92 set-aside includes idled acreage & acreage planted to minor oilseeds, sesame, and crambe. 4/ Includes imports. 5/ Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Simple average of crude soybean oil, Decatur. 9/ Simple average of 48 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. 11/ Weighted average for August 1-April 1; not a projection for the marketing year. 12/ USDA is prohibited from publishing cotton price projections — = not available or not applicable.

Note: Set-aside data for 1993 are from June 15 sign-up report.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Cash Prices, Selected U.S. Commodities

	Marketing year 1/				1992	1993				
	1988/89	1989/90	1990/91	1991/92	Oct	June	July	Aug	Sept	Oct
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	4.17	4.22	2.94	3.77	3.60	3.33	3.38	3.34	3.37	3.52
Wheat, DNS, Minneapolis (\$/bu.) 3/	4.38	4.16	3.06	3.82	3.85	3.98	4.80	4.88	4.90	5.17
Rice, S.W. La. (\$/cwt) 4/	14.85	15.55	15.25	16.48	15.50	11.75	12.38	12.38	12.76	16.20
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	2.68	2.54	2.41	2.52	2.08	2.20	2.38	2.37	2.34	2.43
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	4.17	4.21	4.08	4.36	3.80	3.58	3.99	4.01	3.88	4.03
Barley, feed, Duluth (\$/bu.) 5/	2.32	2.20	2.13	2.17	2.11	1.99	1.98	1.89	1.89	2.01
Barley, malting, Minneapolis (\$/bu.)	4.11	3.28	2.42	2.38	2.39	2.30	2.27	2.27	2.18	2.28
U.S. price, SLM, 1-1/16 in. (cts./lb.) 6/	57.7	69.8	74.8	58.7	49.8	54.4	54.4	53.0	54.0	54.8
Northern Europe price index (cts./lb.) 7/	88.4	82.3	82.9	82.9	52.9	58.5	58.0	55.5	55.1	54.7
U.S. M 1-3/32 in. (cts./lb.) 8/	89.2	83.6	88.2	86.3	58.0	63.0	62.9	57.3	57.0	58.9
Soybeans, no. 1 yellow, 30 day, Chicago (\$/bu.)	7.41	5.86	5.78	5.75	6.33	5.99	6.09	6.88	6.32	6.08
Soybean oil, crude, Decatur (cts./lb.)	21.10	22.30	21.00	19.10	18.31	21.30	23.96	23.33	23.51	22.90
Soybean meal, 48% protein, Decatur (\$/ton) 9/	252.40	188.50	181.40	189.20	180.80	223.00	229.90	219.10	199.9	194.50

1/ Beginning June 1 for wheat & barley, Aug. 1 for rice & cotton; Sept. 1 for corn, sorghum & soybeans; Oct. 1 for soybean meal & oil. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Beginning Mar. 1987 reporting point changed from Minneapolis to Duluth. 6/ Average spot market. 7/ Liverpool Cotton "A" Index; average of five lowest prices of 13 selected growths. 8/ Memphis territory growths. 9/ Note change to 48% protein.

Information contacts: Wheat, rice, & feed grains, Jenny Gonzales (202) 219-0840; Cotton, Lee Meyer (202) 219-0840; Soybeans, Mark Ash (202) 219-0840.

Table 19.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Basic loan rate	Findley or announced loan rate 1/	Payment rates		Effective base acres 2/	Program 3/	Participation rate 4/	
				Total deficiency	Paid land diversion				
					Mandatory				Optional
				\$/bu.		Mill. acres	Percent of base	Percent of base	
Wheat									
1988/89	4.23	2.76	2.21	0.89	—	64.8	27.5/0/0	88	
1989/90	4.10	2.58	2.06	0.32	—	82.3	10/0/0	78	
1990/91 5/	4.00	2.44	1.95	1.28	—	80.5	5/ 5/0/0	83	
1991/92	4.00	2.52	2.04	* 1.35	—	79.2	15/0/0	85	
1992/93	4.00	2.58	2.21	** 0.81	—	78.9	5/0/0	83	
1993/94	4.00	2.88	2.45	*** 1.05	—	78.6	0/0/0	87	
1994/95	—	—	—	—	—	—	0/0/0	—	
				\$/cwt					
Rice									
1988/89	11.15	6.63	7/ 6.50	4.31	—	4.2	25/0/0	94	
1989/90	10.80	6.50	7/ 6.00	3.59	—	4.2	25/0/0	94	
1990/91 6/	10.71	6.50	7/ 5.40	4.18	—	4.2	20/0/0	95	
1991/92	10.71	6.50	7/ 5.85	3.07	—	4.2	5/0/0	95	
1992/93	10.71	6.50	—	** 4.21	—	4.1	0/0/0	96	
1993/94	10.71	6.50	—	*** 4.21	—	4.1	5/0/0	96	
1994/95	—	—	—	—	—	—	0/0/0	—	
				\$/bu.					
Corn									
1988/89	2.93	2.21	1.77	0.36	—	1.75	20/0/10	87	
1989/90	2.84	2.06	1.65	0.59	—	82.7	10/0/0	79	
1990/91 6/	2.75	1.96	1.57	0.61	—	82.6	10/0/0	78	
1991/92	2.75	1.89	1.62	0.41	—	82.7	7.5/0/0	77	
1992/93	2.75	2.01	1.72	** 0.73	—	82.1	5/0/0	76	
1993/94	2.75	1.99	1.72	*** 0.72	—	81.9	10/0/0	81	
1994/95	—	—	—	—	—	—	0/0/0	—	
				\$/bu.					
Sorghum									
1988/89	2.79	2.10	1.68	0.48	—	1.65	20/0/10	82	
1989/90	2.70	1.96	1.57	0.66	—	16.2	10/0/0	71	
1990/91 5/	2.61	1.86	1.49	0.58	—	15.4	10/0/0	70	
1991/92	2.61	1.80	1.54	0.37	—	13.6	7.5/0/0	77	
1992/93	2.61	1.91	1.63	** 0.70	—	13.6	5/0/0	79	
1993/94	2.61	1.89	1.63	*** 0.70	—	13.6	5/0/0	81	
1994/95	—	—	—	—	—	—	0/0/0	—	
				\$/bu.					
Barley									
1988/89	2.51	1.80	1.44	0.00	—	1.40	20/0/10	79	
1989/90	2.44	1.68	1.34	0.00	—	12.3	10/0/0	67	
1990/91 5/	2.36	1.60	1.28	0.20	—	11.9	10/0/0	68	
1991/92	2.36	1.54	1.32	0.62	—	11.5	7.5/0/0	76	
1992/93	2.36	1.64	1.40	** 0.58	—	11.1	5/0/0	75	
1993/94	2.36	1.62	1.40	*** 0.52	—	10.9	0/0/0	82	
1994/95	—	—	—	—	—	—	0/0/0	—	
				\$/bu.					
Oats									
1988/89	1.55	1.14	0.81	0.00	—	7.9	5/0/0	30	
1989/90	1.50	1.08	0.85	0.00	—	7.8	5/0/0	18	
1990/91 5/	1.45	1.01	0.81	0.32	—	7.5	5/0/0	09	
1991/92	1.45	0.97	0.83	0.35	—	7.3	0/0/0	38	
1992/93	1.45	1.03	0.88	* 0.17	—	7.2	0/0/0	40	
1993/94	1.45	1.02	0.88	*** 0.15	—	7.1	0/0/0	46	
1994/95	—	—	—	—	—	—	0/0/0	—	
				\$/bu.					
Soybeans 9/									
1988/89	—	—	4.77	—	—	—	—	—	
1989/90	—	—	4.53	—	—	—	—	—	
1990/91 5/	—	—	4.50	—	—	—	—	—	
1991/92	—	—	5.02	—	—	—	—	—	
1992/93	—	—	5.02	—	—	—	—	—	
1993/94	—	—	5.02	—	—	—	—	—	
1994/95	—	—	4.92	—	—	—	—	—	
				Cts./lb.					
Upland cotton									
1988/89	75.9	51.80	11/ 51.80	19.4	—	14.5	12.5/0/0	89	
1989/90	73.4	50.00	11/ 50.00	13.1	—	14.6	25/0/0	89	
1990/91 5/	72.9	50.27	11/ 50.27	7.3	—	14.4	12.5/0/0	86	
1991/92 12/	72.9	50.77	11/ 47.23	10.1	—	14.8	5/0/0	94	
1992/93	72.9	52.35	11/ —	** 20.3	—	14.9	10/0/0	89	
1993/94	72.9	52.35	11/ —	*** 20.55	—	15.1	7.5/0/0	90	
1994/95	72.9	50.00	11/ —	—	—	—	—	—	

1/ There are no Findley loan rates for rice or cotton. See footnotes 7/ & 11/. 2/ National effective crop acreage base as determined by ASCS. Net of CRP.

3/ Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4/ Percentage of effective base acres enrolled in acreage reduction programs. 5/ Payments & loans were reduced by 1.4 percent in 1990/91 due to Gremm-Rudman-Hollings. Budget Reconciliation Act reductions to deficiency payment rates were also in effect in that year. Data do not include these reductions. 6/ Under 1990 modified contracts, participating producers plant up to 105 percent of their wheat base acres. For every acre planted above 95 percent of base, the acreage used to compute deficiency payments was cut by 1 acre. 7/ A marketing loan has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). However, loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to market-year average loan repayment rates. 8/ The sorghum, oats, & barley programs are the same as for corn except as indicated. 9/ There are no target prices, base acres, acreage reduction programs, or deficiency payment rates for soybeans. 10/ Nominal percentage of program crop base acres permitted to shift into soybeans without loss of base. 11/ A marketing loan has been in effect for cotton since 1986/87. In 1987/88 & after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid at less than 70 percent of the loan rate. Data refer to annual average loan repayment rates. 12/ A marketing certificate program was implemented on Aug. 1, 1991. — = not available.

* For wheat, the 1991/92 rate is the total deficiency payment rate for the "regular" program. For the winter wheat option, the rate is \$1.25.

** For wheat, corn, sorghum, barley, and oats, regular deficiency payment rate based on the 5-month price. For rice and upland cotton, total deficiency payment rate.

*** Estimated total deficiency payment rate. Minimum guaranteed payment rate for 0/92 (wheat & feed grains) & 50/92 (rice and upland cotton) programs. Sign-up for 1993 programs was March 1–April 30, 1993.

Note: 1993 effective base acres and participation rates are from June 15 sign-up report.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 20.—Fruit

	1984	1985	1986	1987	1988	1989	1990	1991	1992 P
Citrus 1/ Production (1,000 ton)	10,832	10,525	11,058	11,993	12,781	13,186	10,860	11,285	12,459
Per capita consumpt. (lbs.) 2/	22.5	21.5	24.2	23.9	25.4	23.5	21.4	19.1	24.3
Noncitrus 3/ Production (1,000 tons)	14,301	14,191	13,874	16,011	15,893	16,385	15,657	15,750	17,142
Per capita consumpt. (lbs.) 2/	66.2	65.1	68.7	73.4	71.7	73.0	70.8	70.8	74.4
	1993								
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
F.o.b. shipping point prices									
Apples (\$/carton) 4/	12.33	10.66	11.33	11.50	11.50	11.50	12.78	13.34	12.33
Pears (\$/box) 5/	16.00	16.00	16.08	16.28	18.28	—	—	—	12.07
Grower prices									
Oranges (\$/box) 6/	2.51	2.70	3.32	3.58	3.90	4.73	5.44	10.52	11.87
Grapefruit (\$/box) 6/	2.56	1.59	1.94	1.44	1.45	3.53	2.44	3.51	8.13
Stocks, ending									
Fresh apples (mil. lbs.)	2,769.3	2,011.1	1,341.5	895.1	488.9	201.2	28.4	3,256.8	5,423.4
Fresh pears (mil. lbs.)	128.1	81.7	50.8	23.3	1.8	7.1	148.5	556.8	552.1
Frozen fruits (mil. lbs.)	842.1	744.8	690.3	661.6	710.3	831.3	939.8	997.9	1,179.0
Frozen orange juice (mil. lbs.)	1,289.4	1,283.7	1,440.9	1,462.3	1,351.8	1,147.0	1,029.6	875.7	817.2

1/ 1992 indicated 1991/92 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynne Napper (202) 219-0884.

Table 21.—Vegetables

	Calendar year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 P
Production										
Total vegetables (1,000 cwt)	403,509	456,334	453,030	448,829	478,381	468,779	542,437	561,704	584,682	534,951
Fresh (1,000 cwt) 1/ 3/	185,782	201,817	203,549	203,165	220,638	228,397	239,281	239,104	229,506	238,140
Processed (tons) 2/ 3/	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,780	16,130,020	16,753,920	14,940,550
Mushrooms (1,000 lbs.) 4/	561,531	695,881	587,956	614,393	631,819	687,759	714,992	749,151	746,832	778,357
Potatoes (1,000 cwt)	333,729	362,039	406,609	361,743	389,320	356,438	370,444	402,110	417,622	425,367
Sweet potatoes (1,000 cwt)	12,083	12,902	14,573	12,368	11,611	10,845	11,358	12,594	11,203	11,760
Dry edible beans (1,000 cwt)	15,520	21,070	22,298	22,960	26,031	19,253	23,729	32,379	33,765	22,047
	1992					1993				
	Sept	Oct	Mar	Apr	May	Jun	July	Aug	Sept	Oct
Shipments (1,000 cwt)										
Fresh	15,768	16,848	24,099	18,956	25,574	36,353	19,418	16,292	18,424	16,281
Iceberg lettuce	4,393	4,760	5,054	3,570	5,031	6,318	3,715	3,971	4,971	4,110
Tomatoes, all	2,108	2,570	3,885	2,865	2,540	4,229	2,742	2,183	2,944	2,885
Dry-bulb onions	3,482	3,137	3,390	2,448	2,988	3,720	2,877	2,793	3,638	2,859
Other 5/	5,805	8,481	11,770	10,073	15,014	23,088	10,082	7,345	8,870	6,427
Potatoes, all	11,132	12,474	18,545	18,489	17,946	14,284	9,393	8,022	13,504	11,563
Sweet potatoes	276	419	468	334	218	244	178	154	343	244

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber shipments were not available for 1982 & 1983. 4/ Fresh & processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1 - June 30. 5/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, bell peppers, squash, cantaloupes, honeydews, & watermelons. p = preliminary.

Information contacts: Gary Lucier or John Love (202) 219-0884.

Table 22.—Other Commodities

	Annual					1992		1993		
	1988	1989	1990	1991	1992	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept
Sugar										
Production 1/	7,087	8,841	8,334	7,133	7,501	722	3,918	2,351	825	735
Deliveries 1/	8,188	8,340	8,581	8,704	8,920	2,409	2,303	2,067	2,201	2,481
Stocks, ending 1/	3,132	2,947	2,729	3,039	3,220	1,451	3,225	3,904	2,957	1,589
Coffee										
Composita green price N.Y. (cts./lb.)	119.59	95.17	76.93	70.09	55.30	48.36	61.94	60.48	55.07	69.47
Imports, green bean equiv. (mil. lbs.) 2/	2,072	2,685	2,715	2,553	2,989	704	705	757	596	575
	Annual			1992	1993					
	1990	1991	1992	Aug	Mar	Apr	May	June	July	Aug
Tobacco										
Prices at auctions 3/										
Flue-cured (\$/lb.)	187.3	172.3	—	185.5	—	—	—	—	158.0	160.0
Burley (\$/lb.)	175.3	178.8	—	—	173.0	—	—	—	—	—
Domestic consumption 4/										
Cigarettes (bil.)	523.1	518.3	509.5	43.7	51.4	37.8	39.4	41.0	37.5	39.2
Large cigars (mil.)	2,343.5	2,231.8	2,217.1	185.1	178.8	159.0	175.2	227.7	164.5	211.6

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured. Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: Sugar, Peter Buzzanell (202) 219-0886. Coffee, Fred Gray (202) 219-0888. Tobacco, Vernor Grise (202) 219-0890.

World Agriculture

Table 23.—World Supply & Utilization of Major Crops, Livestock & Products

	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92 P	1992/93 F
Million units							
Wheat							
Area (hectares)	227.9	219.7	217.4	225.8	231.4	222.3	222.4
Production (metric tons)	524.1	496.0	495.0	533.0	588.1	542.3	560.6
Exports (metric tons) 1/	90.7	112.1	102.9	102.0	101.6	108.9	109.4
Consumption (metric tons) 2/	515.7	525.0	524.9	532.2	583.7	559.0	548.0
Ending stocks (metric tons) 3/	179.1	150.1	120.2	121.0	145.4	128.7	143.3
Coarse grains							
Area (hectares)	336.0	323.3	323.2	320.8	314.2	317.9	317.6
Production (metric tons)	822.4	784.2	721.1	790.9	820.9	803.5	856.6
Exports (metric tons) 1/	82.9	88.3	95.2	103.8	88.1	93.5	87.7
Consumption (metric tons) 2/	796.5	807.2	785.0	814.1	808.7	809.3	833.5
Ending stocks (metric tons) 3/	235.2	215.0	151.0	127.9	140.2	134.4	157.5
Rice, milled							
Area (hectares)	145.1	141.7	145.5	146.8	146.7	145.7	145.2
Production (metric tons)	316.7	314.5	330.1	343.1	350.7	348.3	351.3
Exports (metric tons) 4/	12.9	11.2	13.9	11.7	12.0	14.0	14.4
Consumption (metric tons) 2/	320.8	319.9	327.7	338.4	345.8	352.9	354.6
Ending stocks (metric tons) 3/	50.9	45.5	47.8	54.5	59.4	54.8	51.5
Total grains							
Area (hectares)	709.0	684.7	686.1	693.2	692.3	685.9	685.2
Production (metric tons)	1,663.2	1,594.7	1,546.2	1,667.0	1,759.7	1,694.1	1,768.5
Exports (metric tons) 1/	186.5	211.0	212.0	217.5	201.7	216.4	211.5
Consumption (metric tons) 2/	1,633.0	1,652.1	1,637.6	1,682.7	1,718.2	1,721.2	1,734.1
Ending stocks (metric tons) 3/	485.2	410.6	319.0	303.4	345.0	217.9	352.3
Oilseeds							
Crush (metric tons)	161.8	168.4	164.5	171.8	176.7	184.2	184.1
Production (metric tons)	194.9	210.5	201.9	212.5	215.9	223.5	226.8
Exports (metric tons)	37.7	39.5	31.5	35.8	33.3	37.7	37.8
Ending stocks (metric tons)	23.3	24.0	22.1	23.7	23.4	21.7	23.5
Meals							
Production (metric tons)	110.7	115.4	111.1	117.0	119.3	124.3	124.9
Exports (metric tons)	36.7	35.8	37.4	39.9	40.7	43.1	41.7
Oils							
Production (metric tons)	50.4	53.3	53.3	57.1	58.2	60.3	60.8
Exports (metric tons)	16.9	17.5	18.1	20.4	20.6	20.8	20.5
Cotton							
Area (hectares)	29.2	30.8	33.7	31.5	33.1	34.7	32.7
Production (bales)	70.6	81.1	84.4	79.8	87.0	96.0	82.5
Exports (bales)	33.4	29.9	33.1	31.3	29.7	28.3	24.7
Consumption (bales)	82.8	84.2	85.3	86.6	85.5	84.4	85.8
Ending stocks (bales)	35.7	32.8	31.8	28.2	28.5	40.8	38.6
	1987	1988	1989	1990	1991	1992	1993 F
Red meat							
Production (metric tons)	112.8	114.2	110.3	117.7	118.1	118.9	120.8
Consumption (metric tons)	110.8	112.8	114.2	115.8	116.5	117.8	119.5
Exports (metric tons) 1/	6.9	7.0	7.1	7.4	7.0	6.6	6.9
Poultry 5/							
Production (metric tons)	32.0	33.1	35.0	36.8	39	40.5	42.0
Consumption (metric tons)	31.4	32.6	34.3	36.2	38.5	39.9	41.4
Exports (metric tons) 1/	1.7	1.7	1.9	2.2	2.3	2.6	2.8
Dairy							
Milk production (metric tons)	425.7	428.9	434.7	442.0	429.4	415.0	408.2

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1987 data correspond with 1986/87, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary. F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 24.—Prices of Principal U.S. Agricultural Trade Products

	Annual		1992		1993					
	1990	1991	1992	Oct	May	June	July	Aug	Sept	Oct
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.72	3.52	4.13	3.85	3.70	3.31	3.50	3.56	3.58	3.72
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.79	2.75	2.68	2.42	2.51	2.37	2.64	2.61	2.59	2.71
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.65	2.69	2.63	2.33	2.42	2.30	2.60	2.58	2.52	2.57
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	6.24	6.05	6.01	5.67	6.26	6.27	7.32	7.01	6.69	6.40
Soybean oil, Decatur (cts./lb.)	22.75	20.14	19.18	18.31	21.26	21.21	23.96	23.34	23.51	22.90
Soybean meal, Decatur (\$/ton)	169.37	172.90	177.79	180.63	193.74	193.41	229.44	219.06	202.13	195.43
Cotton, 7-market avg. spot (cts./lb.)	71.25	69.69	53.90	49.47	56.36	54.38	54.35	53.04	54.01	54.57
Tobacco, avg. price at auction (cts./lb.)	169.61	179.23	172.58	181.93	157.44	157.44	158.01	159.51	173.08	174.92
Rice, f.o.b. mill, Houston (\$/cwt)	15.52	16.48	16.80	16.50	14.18	13.35	13.50	13.50	13.50	16.13
Inedible tallow, Chicago (cts./lb.)	13.54	13.26	14.37	15.73	15.00	15.11	14.95	14.25	14.59	14.68
Import commodities										
Coffee, N.Y. spot (\$/lb.)	0.81	0.71	0.50	0.49	0.53	0.52	0.61	0.63	0.68	0.66
Rubber, N.Y. spot (cts./lb.)	46.28	45.73	46.25	47.83	43.78	43.78	43.30	43.65	44.54	44.23
Cocoa beans, N.Y. (\$/lb.)	0.55	0.52	0.47	0.46	0.42	0.41	0.45	0.48	0.53	0.53

Information contact: Mary Teymourian (202) 219-0824.

Table 25.—Indexes of Real Trade-Weighted Dollar Exchange Rates ^{1/}

	1992	1993									
	Dec	Jan	Feb	Mar	Apr	May P	June P	July P	Aug P	Sept P	Oct P
	1985 = 100										
Total U.S. trade 2/	65.8	67.3	68.4	68.3	66.1	66.9	66.3	66.2	68.2	67.0	67.9
Agricultural trade											
U.S. markets	77.3	78.2	78.4	78.3	77.0	77.3	75.8	76.8	72.7	69.8	69.1
U.S. competitors	77.4	78.3	78.6	79.1	78.4	78.9	78.7	78.8	79.1	79.0	78.0
Wheat											
U.S. markets	95.9	97.3	98.1	98.8	98.8	99.7	93.7	94.4	87.2	86.7	74.7
U.S. competitors	73.3	74.1	73.7	73.0	72.6	72.9	74.9	75.7	76.7	77.0	77.1
Soybeans											
U.S. markets	64.2	65.6	65.9	65.5	63.9	64.3	63.3	64.7	62.0	61.6	61.7
U.S. competitors	53.0	53.3	53.7	53.9	53.8	54.0	50.4	50.2	50.3	51.0	51.8
Corn											
U.S. markets	68.9	69.6	69.3	68.6	67.1	67.1	66.5	67.3	62.0	61.6	61.0
U.S. competitors	57.2	57.5	57.7	57.8	56.3	56.4	57.8	58.9	59.2	57.9	58.3
Cotton											
U.S. markets	73.4	74.1	74.1	73.6	72.4	72.6	71.3	72.0	57.8	49.6	53.9
U.S. competitors	108.4	110.5	110.2	110.4	110.0	110.3	104.9	105.1	104.8	104.9	97.8

^{1/} Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of *Agricultural Outlook* for a discussion of the calculations and the weights used. ^{2/} Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter (202) 219-0718.

Table 26.—Trade Balance

	Fiscal year ^{1/}								Sept
	1987	1988	1989	1990	1991	1992	1993	1994 F	1993
	\$ million								
Exports									
Agricultural	27,876	35,316	39,590	40,220	37,609	42,430	42,590	42,500	3,220
Nonagricultural	202,911	258,656	301,289	326,059	356,682	383,517	390,770	—	32,700
Total 2/	230,787	293,972	340,859	366,279	394,291	425,947	433,360	—	35,920
Imports									
Agricultural	20,650	21,014	21,476	22,560	22,588	24,323	24,454	24,500	1,939
Nonagricultural	367,374	409,138	441,075	458,101	463,720	488,556	537,584	—	48,534
Total 3/	388,024	430,152	462,551	480,661	486,308	512,879	562,038	—	50,473
Trade balance									
Agricultural	7,226	14,302	18,114	17,560	15,021	18,107	18,136	18,000	1,281
Nonagricultural	-164,463	-150,482	-139,806	-132,042	-107,038	-105,039	-146,814	—	-15,834
Total	-157,237	-136,180	-121,692	-114,382	-92,017	-86,932	-128,678	—	-14,553

^{1/} Fiscal years begin October 1 & end September 30. Fiscal year 1993 began Oct. 1, 1992 & ended Sept. 30, 1993. ^{2/} Domestic exports including Department of Defense shipments (F.A.S. value). ^{3/} Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Joel Greene (202) 219-0822.

Table 27.—U.S. Agricultural Exports & Imports

	Fiscal year*			Sept	Fiscal year*			Sept
	1992	1993	1994 F	1993	1992	1993	1994 F	1993
	1,000 units				\$ million			
EXPORTS								
Animals, live (no.) 1/	1,476	1,107	--	74	567	358	--	24
Meats & preps., excl. poultry (mt)	1,107	1,180	2/ 1,000	99	3,236	3,349	--	286
Dairy products (mt) 1/	174	211	--	22	641	762	900	71
Poultry meats (mt)	794	986	1,000	93	915	1,031	--	93
Fats, oils, & greases (mt)	1,392	1,362	1,400	90	498	519	--	32
Hides & skins incl. furskins	--	--	--	--	1,336	1,288	--	107
Cattle hides, whole (no.) 1/	20,803	19,784	--	1,695	1,106	1,062	--	89
Mink pelts (no.) 1/	3,160	3,119	--	76	52	56	--	2
Grains & feeds (mt)	100,881	103,743	--	8,240	13,873	14,104	3/ 13,600	1,137
Wheat (mt)	34,322	36,078	30,000	2,846	4,323	4,737	4/ 3,900	357
Wheat flour (mt)	813	1,075	1,100	71	165	217	--	16
Rice (mt)	2,279	2,710	2,800	253	757	768	1,100	68
Feed grains, incl. products (mt)	50,752	50,705	42,800	4,014	5,801	5,261	5,100	435
Feeds & fodders (mt)	11,267	11,500	5/ 11,800	890	2,019	2,147	--	177
Other grain products (mt)	1,448	1,676	--	156	807	976	--	86
Fruits, nuts, & preps. (mt)	3,505	3,398	--	261	3,514	3,409	3,700	314
Fruit juices incl.								
froz. (1,000 hectoliters) 1/	7,767	7,845	--	610	427	423	--	33
Vegetables & preps. (mt)	2,703	2,790	--	198	2,790	3,220	--	252
Tobacco, unmanufactured (mt)	246	231	--	10	1,568	1,443	1,300	64
Cotton, excl. linters (mt)	1,494	1,125	1,300	54	2,183	1,528	1,700	74
Seeds (mt)	612	533	--	24	650	648	700	46
Sugar, cane or beet (mt) 1/	492	337	--	41	154	106	--	13
Oilseeds & products (mt)	28,671	29,190	--	1,370	7,162	7,211	7,300	397
Oilseeds (mt)	18,939	21,049	--	863	4,735	4,982	--	239
Soybeans (mt)	19,277	20,400	17,100	818	4,318	4,606	4,500	209
Protein meal (mt)	7,082	6,539	--	392	1,445	1,261	--	83
Vegetable oils (mt)	1,651	1,601	--	115	982	968	--	75
Essential oils (mt)	13	13	--	1	184	185	--	15
Other	91	92	--	9	2,733	3,011	--	262
Total	142,175	145,171	130,000	10,512	42,430	42,590	42,500	3,220
IMPORTS								
Animals, live (no.) 1/	2,830	3,461	--	256	1,275	1,569	1,700	127
Meats & preps., excl. poultry (mt)	1,134	1,128	--	94	2,684	2,726	--	237
Beef & veal (mt)	813	793	780	64	1,933	1,919	1,900	168
Pork (mt)	263	276	280	24	625	663	700	56
Dairy products (mt) 1/	232	231	--	20	816	860	900	73
Poultry & products 1/	--	--	--	--	132	137	--	11
Fats, oils, & greases (mt)	48	44	--	3	26	30	--	2
Hides & skins, incl. furskins 1/	--	--	--	--	185	181	--	11
Wool, unmanufactured (mt)	54	80	--	4	167	173	--	9
Grains & feeds (mt)	5,446	4,942	4,800	597	1,548	1,639	1,800	175
Fruits, nuts, & preps., excl. juices (mt)	5,883	6,089	6,000	414	2,919	2,988	--	190
Bananas & plantains (mt)	3,626	3,737	3,700	313	1,083	1,083	1,000	89
Fruit juices (1,000 hectoliters) 1/	26,049	27,053	22,000	2,894	871	640	--	63
Vegetables & Preps. (mt)	2,171	2,733	--	164	2,125	2,440	2,500	148
Tobacco, unmanufactured (mt)	364	386	250	20	1,299	1,101	600	43
Cotton, unmanufactured (mt)	11	12	--	1	10	11	--	1
Seeds (mt)	174	189	220	8	214	214	200	12
Nursery stock & cut flowers 1/	--	--	--	--	578	629	--	62
Sugar, cane or beet (mt)	1,623	1,569	--	223	633	591	--	88
Oilseeds & products (mt)	2,330	2,484	--	234	1,124	1,204	1,400	93
Oilseeds (mt)	429	373	--	27	135	130	--	10
Protein meal (mt)	629	618	--	74	84	89	--	10
Vegetable oils (mt)	1,273	1,492	--	132	904	985	--	73
Beverages excl. fruit								
juices (1,000 hectoliters) 1/	13,739	14,014	--	1,244	2,044	1,975	--	173
Coffee, tea, cocoa, spices (mt)	2,391	2,244	2,300	166	3,415	3,018	--	238
Coffee, incl. products (mt)	1,330	1,185	1,250	85	1,798	1,502	1,600	117
Cocoa beans & products (mt)	773	770	750	59	1,122	1,028	1,000	83
Rubber & allied gums (mt)	920	981	1,200	70	756	839	900	59
Other	--	--	--	--	1,503	1,488	--	126
Total	--	--	--	--	24,323	24,454	24,500	1,939

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1993 began Oct. 1, 1992 & ended Sept. 30, 1993. 1/ Not included in total volume.

2/ Forecasts for footnoted items 2/-5/ are based on slightly different groups of commodities. Totals for fiscal 1993 forecast commodities were 2/ 903 million tons. 3/ \$14,332 million. 4/ \$4,954 million, includes flour. 5/ \$11,885 million. F = forecast. — = not available.

Information contact: Joel Greene (202) 219-0822.

Table 28.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			Sept	Change from year* earlier			Sept
	1992	1993	1994 F	1993	1992	1993	1994 F	1993
	\$ million				Percent			
WESTERN EUROPE	7,740	7,499	7,500	400	6	-3	0	-35
European Community (EC-12)	7,193	7,022	7,000	357	6	-2	0	-36
Belgium-Luxembourg	461	482	—	26	-1	5	—	-57
France	618	613	—	35	8	-1	—	-23
Germany	1,091	1,146	—	66	-4	5	—	-37
Italy	684	568	—	28	1	-17	—	-39
Netherlands	1,812	1,801	—	69	16	-1	—	-43
United Kingdom	882	916	—	69	0	4	—	3
Portugal	240	223	—	11	-4	-7	—	-37
Spain, incl. Canary Islands	951	829	—	25	11	-13	—	-58
Other Western Europe	546	477	500	43	2	-13	5	-27
Switzerland	187	152	—	13	-4	-19	—	20
EASTERN EUROPE	222	468	400	32	-27	111	-15	-19
Poland	49	230	—	11	7	368	—	32
Former Yugoslavia	50	47	—	4	-32	-8	—	146
Romania	76	107	—	7	-7	42	—	-65
Former Soviet Union	2,704	1,581	1,200	94	54	-42	-23	41
ASIA	17,782	17,832	16,400	1,504	10	0	-8	9
West Asia (Mideast)	1,770	1,922	2,000	153	24	9	4	5
Turkey	344	369	—	22	54	7	—	-30
Iraq	0	1	0	1	0	150	0	0
Israel, incl. Gaza & W. Bank	346	382	400	30	21	10	5	62
Saudi Arabia	549	463	500	28	2	-16	8	-53
South Asia	536	641	—	67	43	20	—	52
Bangladesh	123	52	—	6	84	-58	—	-68
India	117	226	—	8	24	93	—	187
Pakistan	226	236	300	46	57	4	27	169
China	690	322	300	11	3	-53	-7	-47
Japan	8,383	8,461	8,900	718	8	1	5	10
Southeast Asia	1,470	1,551	—	121	19	6	—	6
Indonesia	353	327	—	28	27	-7	—	30
Philippines	443	512	600	37	19	16	17	-11
Other East Asia	4,934	4,935	5,000	434	6	0	1	7
Taiwan	1,916	1,999	2,100	186	10	4	5	16
Korea, Rep.	2,200	2,041	2,000	174	2	-7	-2	-4
Hong Kong	817	880	900	73	10	8	2	12
AFRICA	2,304	2,671	2,500	175	22	16	-6	-38
North Africa	1,411	1,659	1,700	130	2	18	2	14
Morocco	156	310	—	30	21	98	—	47
Algeria	478	458	500	44	0	-4	9	185
Egypt	709	756	800	40	2	7	6	-40
Sub-Saharan	893	1,012	800	46	80	13	-21	-73
Nigeria	31	158	—	11	-30	413	—	149
Rep. S. Africa	328	383	—	4	343	17	—	-93
LATIN AMERICA & CARIBBEAN	6,438	6,883	6,900	551	17	7	0	3
Brazil	143	231	200	17	-47	61	-13	137
Caribbean Islands	970	1,015	—	95	-4	5	—	16
Central America	587	675	—	63	18	15	—	11
Colombia	142	234	—	14	15	65	—	-10
Mexico	3,676	3,660	3,900	253	27	0	7	-9
Peru	179	172	—	22	19	-4	—	38
Venezuela	394	502	400	45	28	27	-20	4
CANADA	4,812	5,220	5,200	417	9	6	0	2
OCEANIA	428	456	400	47	23	6	-12	17
TOTAL	42,430	42,590	42,500	3,220	13	0	0	-5
Developed countries	21,968	22,337	22,400	1,610	9	2	0 ¹⁾	-10
Developing countries	19,771	19,918	—	1,599	17	1	—	2
Other countries	691	335	—	11	3	-51	—	-47

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1993 began Oct. 1, 1992 & ended Sept. 30, 1993. F = forecast. — = not available.
 Note: Adjusted for transshipments through Canada.

Information contact: Joel Greane (202) 219-0822.

Farm Income

Table 29.—Farm Income Statistics

	Calendar year											
	1984	1985	1986	1987	1988	1989	1990	1991	1992 P	1993 F		1994 F
	\$ billion											
1. Farm receipts	147.7	150.1	140.0	148.5	158.4	168.9	177.5	178.5	178.8	180	172 to 180	
Crops (incl. net CCC loans)	69.9	74.3	63.7	65.9	71.7	77.0	80.1	81.9	84.8	83	85 to 89	
Livestock	72.9	69.8	71.6	76.0	79.4	84.1	89.8	86.8	88.4	90	87 to 91	
Farm related 1/	4.9	6.0	5.7	6.6	7.3	7.8	7.6	7.8	7.6	7	7 to 9	
2. Direct Government payments	8.4	7.7	11.8	16.7	14.5	10.9	9.3	8.2	9.2	11	8 to 12	
Cash payments	4.0	7.6	8.1	6.8	7.1	6.1	8.4	8.2	9.2	11	8 to 12	
Value of PIK commodities	4.5	0.1	3.7	10.1	7.4	1.7	0.9	0.0	0.0	0	0 to 1	
3. Gross cash income (1+2) 2/	156.1	157.9	152.8	165.1	172.9	179.8	186.8	184.7	187.9	191	190 to 198	
4. Nonmoney income 3/	5.9	5.8	5.5	5.6	6.3	6.3	6.2	5.9	6.1	6	6 to 7	
5. Value of inventory change	6.0	-2.3	-2.2	-2.3	-3.4	4.8	3.4	-0.3	3.8	-3	2 to 6	
6. Total gross farm income (3+4+5)	168.0	161.2	156.1	168.5	175.8	190.9	196.4	190.3	197.7	195	201 to 210	
7. Cash expenses 4/	118.7	110.7	105.0	109.4	118.4	125.1	130.9	131.4	130.2	132	130 to 137	
8. Total expenses	141.9	132.4	125.1	128.8	137.0	144.0	149.9	150.3	149.1	151	150 to 159	
9. Net cash income (3-7)	37.4	47.1	47.8	55.8	54.5	54.7	55.9	53.3	57.7	59	55 to 62	
10. Net farm income (6-8)	26.1	28.8	31.0	39.7	38.8	46.9	46.5	40.0	48.6	44	47 to 54	
Deflated (1987\$)	26.7	30.5	32.0	39.7	37.3	43.3	41.1	34.0	40.2	35	37 to 42	

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. Total may not add because of rounding. P = preliminary. F = forecast.

Note: 1988-92 accounts (primarily expenses) have been revised to reflect improved methods for estimating farm income. Call contact for information.

Information contact: Robert McElroy (202) 219-0800.

Table 30.—Average Income to Farm Operator Households

	Calendar year					
	1989	1990	1991	1992 P	1993 F	1994 F
	\$ per operator household					
Farm income to household 1/	5,798	5,742	4,397	4,337	4,266 to 5,581	4,233 to 5,536
Self-employment farm income	4,723	4,973	2,283	2,929	n/a	n/a
Other farm income to household	1,073	768	2,114	2,010	n/a	n/a
Plus: Total off-farm income	26,223	33,265	31,638	35,731	34,954	36,457
Income from wages, salaries, and non-farm businesses	19,487	24,778	23,551	27,022	n/a	n/a
Income from interest, dividends, transfer payments, etc.	6,756	8,487	8,087	8,709	n/a	n/a
Equals: Farm operator household income	32,019	39,007	36,025	40,068	39,220 to 40,515	40,690 to 41,993

1/ Farm income to the household equals self-employment income plus amounts that operators pay themselves & family members to work on the farm, income from renting out acreage, & net income from a farm business other than the one being surveyed. Data for 1989-90 are based on surveys that did not fully account for small farms. Data for 1991 include an additional 350,000 farms, many with gross sales under \$10,000 & negative net farm incomes. P = preliminary. F = forecasts, not available at this time.

Information contact: Janet Perry (202) 219-0807.

Table 31.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1984	1985	1986	1987	1988	1989	1990	1991	1992 P	1993 F	1994 F
	\$ billion										
Assets											
Real estate	661.8	586.2	542.3	578.9	595.5	615.7	628.2	623.2	633.1	648	660 to 670
Non-real estate	195.2	186.5	182.1	193.7	205.6	214.1	220.2	219.1	228.4	230	230 to 240
Livestock & poultry	49.5	46.3	47.8	58.0	62.2	66.2	70.9	68.1	71.3	71	72 to 76
Machinery & motor vehicles	85.0	82.9	81.5	80.0	81.2	85.1	85.4	85.8	85.6	86	85 to 89
Crops stored 2/	26.1	22.9	16.3	17.5	23.3	23.4	22.8	22.0	24.1	25	24 to 28
Purchased inputs	2.0	1.2	2.1	3.1	3.5	2.6	2.8	2.6	3.9	3	2 to 4
Financial assets	32.0	33.3	34.5	35.1	35.4	36.8	38.3	40.6	43.4	45	45 to 49
Total farm assets	657.0	772.7	724.4	772.6	801.1	829.7	848.4	842.2	861.5	878	895 to 905
Liabilities											
Real estate debt 3/	106.7	100.1	90.4	82.4	77.6	75.4	74.1	74.6	75.0	77	76 to 80
Non-real estate debt 4/	87.1	77.5	66.6	62.0	61.7	61.8	63.2	64.3	63.6	66	65 to 69
Total farm debt	193.8	177.6	157.0	144.4	139.4	137.2	137.4	138.9	139.3	143	142 to 148
Total farm equity	663.3	595.1	567.5	628.2	661.0	692.6	710.9	703.3	722.2	735	750 to 760
	Percent										
Selected ratios											
Debt-to-assets	22.6	23.0	21.7	18.7	17.4	16.5	16.2	16.5	16.2	16	15 to 17
Debt-to-equity	29.2	29.8	27.7	23.0	21.1	19.8	19.3	19.7	18.3	19	18 to 20
Debt-to-net cash income	518	377	328	259	256	251	246	260	241	240	240 to 250

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0788.

Table 32.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1991	1992	Aug 1993	Sept 1993	1991	1992	Aug 1993	Sept 1993	1991	1992	Aug 1993	Sept 1993
	\$ million 2/											
NORTH ATLANTIC												
Maine	292	301	27	26	192	213	25	20	484	513	52	46
New Hampshire	63	65	5	5	79	79	8	12	142	144	13	17
Vermont	370	389	30	30	64	63	3	4	434	452	33	34
Massachusetts	129	135	11	11	356	356	36	53	485	491	47	64
Rhode Island	12	13	1	1	57	60	2	14	69	72	3	15
Connecticut	208	240	24	22	264	249	16	28	472	489	40	50
New York	1,793	1,914	150	147	1,081	1,032	108	142	2,874	2,948	258	289
New Jersey	193	192	18	16	465	465	57	40	658	657	73	56
Pennsylvania	2,405	2,554	202	216	997	1,064	94	100	3,402	3,618	296	316
NORTH CENTRAL												
Ohio	1,681	1,580	141	138	2,484	2,587	148	343	4,165	4,167	299	481
Indiana	1,917	1,821	181	158	2,583	2,684	165	503	4,500	4,505	346	661
Illinois	2,353	2,202	198	195	5,181	5,431	383	694	7,534	7,634	581	889
Michigan	1,288	1,325	101	121	1,922	1,962	124	169	3,210	3,288	225	290
Wisconsin	4,191	4,313	333	329	1,225	1,186	104	132	5,417	5,499	437	481
Minnesota	3,593	3,822	309	299	3,786	3,480	189	257	7,378	7,082	498	556
Iowa	5,720	5,614	519	501	4,529	4,716	387	386	10,250	10,330	906	887
Missouri	2,268	2,188	205	208	1,642	1,935	110	181	3,911	4,123	315	399
North Dakota	670	755	47	53	1,877	2,339	244	291	2,547	3,094	291	344
South Dakota	2,125	1,966	140	165	1,198	1,263	103	171	3,314	3,229	243	336
Nebraska	5,933	5,674	638	496	3,111	3,109	148	197	9,044	8,783	786	693
Kansas	4,800	4,558	384	372	2,276	2,442	175	209	7,076	7,000	559	581
SOUTHERN												
Delaware	438	451	41	36	184	184	22	22	622	636	63	58
Maryland	798	904	72	70	564	587	36	69	1,352	1,391	108	139
Virginia	1,363	1,353	125	147	753	781	93	110	2,116	2,134	218	257
West Virginia	253	267	22	26	71	75	8	12	324	343	30	38
North Carolina	2,617	2,795	258	269	2,339	2,386	388	465	4,956	5,181	644	734
South Carolina	549	545	47	49	677	632	79	94	1,226	1,177	126	143
Georgia	2,182	2,309	217	206	1,772	1,764	157	303	3,934	4,073	374	509
Florida	1,172	1,180	118	106	4,953	4,985	181	170	6,125	6,145	309	276
Kentucky	1,705	1,641	124	149	1,491	1,580	30	89	3,196	3,221	154	238
Tennessee	1,044	1,061	118	88	893	1,042	39	55	1,936	2,103	157	143
Alabama	2,237	2,083	198	197	770	788	25	120	3,007	2,830	223	317
Mississippi	1,276	1,355	137	139	1,108	1,247	17	36	2,383	2,602	154	175
Arkansas	2,664	2,702	282	239	1,578	1,901	38	100	4,242	4,602	300	339
Louisiana	636	587	62	58	1,092	1,259	34	65	1,728	1,846	96	123
Oklahoma	2,788	2,498	282	231	1,068	1,137	126	46	3,856	3,635	408	277
Texas	7,881	7,523	789	737	4,336	4,097	375	292	12,217	11,620	1,164	1,029
WESTERN												
Montana	810	921	25	64	704	821	53	6	1,514	1,742	78	72
Idaho	1,085	1,173	114	108	1,586	1,643	120	165	2,651	2,816	234	273
Wyoming	668	606	36	111	169	167	23	8	837	773	61	119
Colorado	2,663	2,955	209	250	1,099	1,083	110	98	3,762	4,038	319	348
New Mexico	978	1,040	78	91	474	490	52	37	1,452	1,530	130	128
Arizona	786	892	78	82	1,081	943	31	45	1,867	1,836	109	107
Utah	550	556	44	51	171	182	13	18	721	738	57	69
Nevada	209	202	19	15	88	71	7	6	297	273	26	21
Washington	1,299	1,532	133	128	2,844	2,922	314	382	4,143	4,454	447	510
Oregon	828	795	67	78	1,696	1,695	189	177	2,525	2,490	256	255
California	5,254	5,055	484	437	12,523	13,179	1,051	1,162	17,777	18,234	1,535	1,599
Alaska	6	6	0	0	20	20	2	2	27	25	2	2
Hawaii	88	88	7	7	474	476	41	39	562	564	48	46
UNITED STATES	86,780	86,358	7,830	7,658	81,942	84,810	6,291	8,151	168,721	171,168	14,121	15,909

1/ Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806. To receive current monthly cash receipts via mail contact Bob Dubman at (202) 219-0804

Table 33.—Cash Receipts From Farming

	Annual						1992	1993				
	1987	1988	1989	1990	1991	1992	Sept	May	June	July	Aug	Sept
	\$ million											
Farm marketings & CCC loans*	141,844	151,154	161,183	169,973	168,721	171,168	16,385	12,597	12,208	13,413	14,122	15,809
Livestock & products	75,993	79,434	84,122	88,843	86,780	88,358	7,541	7,827	7,000	7,352	7,832	7,657
Meat animals	44,478	46,492	48,857	51,911	51,088	48,427	4,355	4,510	3,799	3,903	4,650	4,544
Dairy products	17,727	17,841	19,398	20,149	18,037	18,848	1,836	1,793	1,875	1,847	1,559	1,499
Poultry & eggs	11,515	12,868	15,372	16,243	15,122	15,441	1,321	1,339	1,388	1,424	1,419	1,383
Other	2,274	2,433	2,498	2,540	2,531	2,642	229	186	200	378	204	231
Crops	65,851	71,720	77,040	80,130	81,942	84,810	8,844	4,770	5,148	6,061	6,290	6,152
Food grains	5,790	7,469	8,247	7,517	7,410	8,890	934	261	1,099	1,209	900	325
Feed crops	14,635	14,283	17,054	18,671	19,491	20,073	2,028	847	1,100	1,512	1,471	2,104
Cotton (lint & seed)	4,189	4,546	5,033	5,488	5,238	5,207	198	54	39	32	65	194
Tobacco	1,816	2,083	2,415	2,741	2,888	2,961	589	0	0	63	505	472
Oil-bearing crops	11,283	13,500	11,896	12,258	12,700	12,998	1,476	778	584	591	604	1,679
Vegetables & melons	9,898	9,818	11,696	11,449	11,552	11,436	1,375	1,399	1,028	931	1,192	1,194
Fruits & tree nuts	6,065	9,027	9,173	9,440	9,888	10,183	1,119	352	587	989	828	1,076
Other	10,178	10,993	11,657	12,566	12,778	13,065	1,125	1,087	710	733	725	1,108
Government payments	16,747	14,480	10,887	9,298	8,214	9,169	517	945	356	121	88	224
Total	158,591	165,582	171,914	179,218	176,508	179,338	18,902	13,520	12,569	13,448	14,208	16,033

* Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period.

Information contact: Roger Strickland (202) 219-0806. To receive current monthly cash receipts via mail contact Bob Dubman at (202) 219-0804.

Table 34.—Farm Production Expenses

	Calendar year									
	1985	1986	1987	1988	1989	1990	1991	1992 P	1993 F	1994 F
	\$ million									
Feed purchased	16,949	17,472	17,463	20,246	20,744	20,387	19,330	19,832	20,000	18,000 to 23,000
Livestock & poultry purchased	9,184	9,758	11,842	12,764	13,138	14,833	14,272	13,780	15,000	12,000 to 16,000
Seed purchased	3,128	3,188	3,259	4,062	4,400	4,521	5,119	4,918	5,000	4,000 to 6,000
Farm-origin inputs	29,281	30,418	32,564	37,071	38,281	39,742	38,722	38,531	40,000	38,000 to 42,000
Fertilizer & lime	7,512	6,820	6,453	7,981	8,177	8,210	8,671	8,340	8,000	7,000 to 11,000
Fuels & oils	6,436	5,310	4,957	4,800	4,772	5,790	5,589	5,311	5,000	4,000 to 7,000
Electricity	1,878	1,795	2,159	2,360	2,648	2,807	2,834	2,611	3,000	2,000 to 4,000
Pesticides	4,334	4,324	4,612	4,148	5,013	5,364	6,324	6,475	7,000	6,000 to 8,000
Manufactured inputs	20,159	18,249	18,078	18,987	20,810	21,971	23,229	22,738	23,000	22,000 to 26,000
Short-term interest	8,735	7,387	6,787	6,674	6,660	6,528	6,124	5,793	5,000	4,000 to 7,000
Real estate interest 1/	9,878	9,131	8,205	7,581	7,190	6,740	5,953	5,592	5,000	5,000 to 7,000
Total interest charges	18,613	16,498	14,972	14,255	13,850	13,268	12,088	11,385	11,000	10,000 to 14,000
Repair & maintenance 1/	6,370	6,426	6,759	7,717	8,407	8,553	8,630	8,469	9,000	8,000 to 10,000
Contract & hired labor	10,008	9,484	9,975	10,954	11,928	13,950	13,928	14,060	14,000	12,000 to 16,000
Machine hire & custom work	2,354	2,099	2,105	2,510	2,937	2,959	3,085	3,317	3,000	3,000 to 5,000
Marketing, storage, & transportation	4,127	3,852	4,078	3,516	4,206	4,211	4,719	4,542	4,000	4,000 to 8,000
Misc. operating expenses 1/ 2/	10,010	9,759	11,171	12,001	12,003	12,727	13,539	12,844	13,000	11,000 to 15,000
Other operating expenses	32,858	31,420	34,088	38,697	39,481	42,400	43,899	43,232	44,000	42,000 to 47,000
Capital consumption 1/	19,299	17,788	17,091	17,378	17,863	17,682	17,845	17,769	18,000	17,000 to 21,000
Taxes 1/	4,542	4,612	4,653	4,955	5,214	5,690	5,813	5,838	6,000	5,000 to 7,000
Net rent to nonoperator landlords	7,890	6,099	7,124	7,684	8,731	9,164	9,112	9,603	9,000	8,000 to 10,000
Other overhead expenses	31,531	28,499	29,069	30,016	31,807	32,617	32,370	33,210	33,000	33,000 to 38,000
Total production expenses	132,433	125,084	128,772	137,028	144,029	149,897	150,307	149,094	151,000	150,000 to 159,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases, dairy assessments & feeding fees paid by nonoperators. Totals may not add because of rounding. P = preliminary. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Robert McElroy (202) 219-0800.

Table 35.—CCC Net Outlays by Commodity & Function.

COMMODITY/PROGRAM	Fiscal year									
	1985	1986	1987	1988	1989	1990	1991	1992	1993 E	1994 E
	\$ million									
Feed grains										
Corn	4,403	10,624	12,346	8,227	2,863	2,450	2,387	2,105	4,882	3,421
Grain sorghum	483	1,185	1,203	764	467	381	243	190	400	310
Barley	336	471	394	57	45	-83	71	174	203	133
Oats	2	28	17	-2	1	-5	12	32	15	12
Corn & oat products	7	5	7	7	8	8	9	9	9	7
Total feed grains	5,211	12,211	13,967	9,053	3,384	2,721	2,722	2,510	5,509	3,883
Wheat	4,891	3,440	2,838	878	53	808	2,958	1,719	2,424	2,304
Rice	990	947	908	128	631	667	867	715	1,035	955
Upland cotton	1,553	2,142	1,788	886	1,461	-79	382	1,443	2,304	2,329
Tobacco	455	253	-348	-453	-387	-307	-143	29	130	25
Dairy	2,085	2,337	1,168	1,295	879	505	839	232	315	249
Soybeans	711	1,597	-476	-1,076	-86	5	40	-29	9	-37
Peanuts	12	32	8	7	13	1	48	41	-11	4
Sugar	184	214	-85	-248	-25	15	-20	-19	-27	-24
Honey	81	89	73	100	42	47	19	17	15	15
Wool	109	123	152	1/ 5	93	104	172	191	176	196
Operating expense 3/	346	457	535	614	620	618	625	6	6	6
Interest expenditure	1,435	1,411	1,219	425	98	632	745	532	98	39
Export programs 4/	134	102	278	200	-102	-34	733	1,455	3,142	1,833
1989/93 Disaster/Tree/										
livestock assistance	0	0	0	0	3,919	2/ 181	121	1,054	1,389	2,348
Other	-314	488	371	1,865	110	609	2	-158	636	1,297
Total	17,683	25,841	22,408	12,461	10,523	8,471	10,110	9,738	17,150	15,420
FUNCTION										
Price-support loans (net)	6,272	13,828	12,199	4,579	-928	-399	418	584	2,152	1,368
Direct payments 5/										
Deficiency	6,302	8,168	4,833	3,971	5,798	4,178	8,224	5,491	8,573	7,307
O diversion	1,525	64	382	8	-1	0	0	0	0	0
Dairy termination	0	489	587	280	168	189	96	2	0	0
Loan Deficiency	0	27	60	0	42	3	21	214	385	425
Other	0	0	0	0	0	0	0	140	203	249
Disaster	0	0	0	8	4	0	0	0	0	0
Total direct payments	7,827	8,746	5,862	4,245	6,011	4,370	6,341	5,847	9,161	7,981
1988-93 crop disaster	0	0	0	0	3,388	2/ 5	6	960	1,328	2,342
Emergency livestock/tree/										
forage assistance	0	0	0	31	533	156	115	94	81	4
Purchases (net)	1,331	1,670	-479	-1,131	116	-48	648	321	453	378
Producer storage										
payments	329	485	832	658	174	185	1	14	12	69
Processing, storage,										
& transportation	657	1,013	1,859	1,113	659	317	394	185	121	135
Operating expense 3/	346	457	535	614	620	618	625	6	6	6
Interest expenditure	1,435	1,411	1,219	425	98	632	745	532	98	39
Export programs 4/	134	102	278	200	-102	-34	733	1,455	3,142	1,833
Other	-648	329	305	1,727	-46	669	88	-280	618	1,269
Total	17,683	25,841	22,408	12,461	10,523	8,471	10,110	9,738	17,150	15,420

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$128,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Direct Export Credit Program, CCC Transfers to the General Sales Manager, Market Promotion Program, starting in fiscal 1991 & starting in fiscal 1992 the Export Guarantee Program - Credit Reform, Export Enhancement Program, & Dairy Export Incentive Program. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-93. E = Estimated in the fiscal 1994 Mid-Session Review Budget which was released September 1, 1993 based on June, 1993 supply & demand estimates. These estimates incorporate the aggregate outlay impact of the FY 1993 Disaster Supplemental for the Midwest floods and the Omnibus Budget Reconciliation Act of 1993. The impact of the Disaster Act and the Reconciliation Act on outlay estimates for individual CCC commodities is not reflected in this table. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 720-5148.

Food Expenditures

Table 36.—Food Expenditures

	Annual			1993			1993 year-to-date		
	1990	1991	1992	Sept	Oct P	Nov P	Sept	Oct	Nov P
	\$ billion								
Sales 1/ Off-premise use 2/ Meals & snacks 3/	302.6 225.3	315.3 232.4	319.4 240.4	26.9 21.5	27.1 22.0	26.8 20.4	242.0 189.1	269.1 211.1	285.9 231.5
	1992 \$ billion								
Sales 1/ Off-premise use 2/ Meals & snacks 3/	312.9 237.7	317.6 237.1	319.3 240.3	26.3 21.1	26.4 21.5	25.9 19.7	237.4 186.6	263.9 208.1	289.7 227.9
	Percent change from year earlier (\$ bil.)								
Sales 1/ Off-premise use 2/ Meals & snacks 3/	8.9 7.2	4.2 3.2	1.3 3.4	3.4 9.0	0.4 4.6	2.4 3.1	2.1 5.6	1.9 5.5	1.9 5.3
	Percent change from year earlier (1992 \$ bil.)								
Sales 1/ Off-premise use 2/ Meals & snacks 3/	2.2 2.4	1.5 -0.2	0.5 1.3	1.5 7.0	-2.2 2.7	-0.7 0.5	0.0 4.1	-0.2 3.9	-0.2 3.6

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. R = revised. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food excluding alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr. Econ. Rpt. No. 575, Aug 1987.

Information contact: Alden Manchester (202) 219-0880.

Transportation

Table 37.—Rail Rates; Grain & Fruit-Vegetable Shipments

	Annual			1992	1993					
	1990	1991	1992	Oct	May	June	July	Aug	Sept	Oct.
Rail freight rate index 1/ (Dec. 1984=100)										
All products	107.5	109.3	109.9	110.1	110.7	110.7	110.7 P	110.8 P	110.9 P	111.3 P
Farm products	110.4	111.4	111.1	112.4	113.3	113.2	113.2 P	113.2 P	113.4 P	115.8 P
Grain	110.1	111.2	111.4	113.1	114.2	114.1	114.1 P	114.0 P	114.3 P	116.0 P
Food products	105.4	108.1	108.7	108.1	108.8	108.8	108.9 P	108.9 P	108.7 P	108.7 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	27.6	26.6	27.2	30.7	24.7 P	24.7 P	25.9 P	25.6 P	26.9 P	28.6 P
Barge shipments (mil. ton) 3/	3.8	3.3	3.4	2.6	3.7	3.7	0.4	1.7	3.6	3.5
Fresh fruit & vegetable shipments 4/ 5/										
Piggy back (mil. cwt)	1.8	1.5	1.6	1.3	2.0	1.9	1.1	1.0	1.4	1.0
Rail (mil. cwt)	2.3	2.1	2.6	2.0	3.0	3.2	1.8	0.8	1.3	1.7
Truck (mil. cwt)	41.5	41.9	44.0	42.2	57.5	55.6	46.5	39.4	37.9	45.3
Cost of operating trucks hauling produce 4/										
Fleet operation (cts./mile)	130.5	126.5	124.1	125.0	127.3	127.2	127.0	126.2	125.8	129.2

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Shipments on Illinois & Mississippi waterways. U.S. Corps of Engineers. 4/ Agricultural Marketing Service, USDA. 5/ Preliminary data for 1993. P = preliminary. -- = not available.

Information contact: T. Q. Hutchinson (202) 219-0840

Food Supply & Use

Table 38.—Per Capita Consumption of Major Food Commodities^{1/}

Commodity	1985	1986	1987	1988	1989	1990	1991	1992 P
Pounds								
Red meats 2/3/4/	124.9	122.2	117.4	119.5	115.9	112.4	111.9	114.1
Beef	74.6	74.4	69.6	68.6	65.4	64.0	63.1	62.8
Veal	1.5	1.6	1.3	1.1	1.0	0.9	0.8	0.8
Lamb & mutton	1.1	1.0	1.0	1.0	1.1	1.1	1.0	1.0
Pork	47.7	45.2	45.6	48.8	48.4	46.4	46.9	49.5
Poultry 2/3/4/	45.2	47.1	50.7	51.7	53.6	55.9	58.0	60.1
Chicken	36.1	37.0	39.1	39.3	40.5	42.1	43.9	45.9
Turkey	9.1	10.2	11.6	12.4	13.1	13.8	14.1	14.2
Fish & shellfish 3/	15.0	15.4	16.1	15.1	15.6	15.0	14.8	14.7
Eggs 4/	32.9	32.6	32.7	31.6	30.4	30.1	30.0	30.2
Dairy products								
Cheese (excluding cottage) 2/5/	22.5	23.1	24.1	23.7	23.8	24.6	25.0	26.0
American	12.2	12.1	12.4	11.5	11.0	11.1	11.1	11.3
Italian	6.5	7.0	7.6	8.1	8.5	9.0	9.4	10.0
Other cheese 6/	3.9	4.0	4.1	4.1	4.3	4.6	4.6	4.7
Cottage cheese	4.1	4.1	3.9	3.9	3.6	3.4	3.3	3.1
Beverage milks 2/	229.7	228.6	226.5	222.4	224.3	221.7	221.2	218.5
Fluid whole milk 7/	123.4	116.5	111.9	105.7	97.6	90.4	87.4	84.1
Fluid lowfat milk 8/	93.7	98.6	100.6	100.5	106.5	108.4	109.9	109.4
Fluid skim milk	12.6	13.5	14.0	16.1	20.2	22.9	23.9	25.0
Fluid cream products 9/	6.7	7.0	7.1	7.1	7.3	7.1	7.3	7.5
Yogurt (excluding frozen)	4.1	4.4	4.4	4.7	4.3	4.1	4.2	4.3
Ice cream	18.1	18.4	18.4	17.3	16.1	15.8	16.3	16.4
Ice milk	6.9	7.2	7.4	8.0	8.4	7.7	7.4	7.1
Frozen yogurt	—	—	—	—	2.0	2.8	3.5	3.1
All dairy products, milk equivalent, milkfat basis 10/	593.8	591.5	601.3	582.9	585.2	589.7	585.2	584.6
Fats & oils — Total fat content	64.3	64.4	62.9	63.0	60.4	62.2	63.8	65.6
Butter & margarine (product weight)	15.7	16.0	15.2	14.8	14.0	15.3	14.8	15.2
Shortening	22.9	22.1	21.4	21.5	22.2	22.2	22.4	22.4
Lard & edible tallow (direct use)	3.7	3.5	2.7	2.6	2.1	2.5	3.1	4.1
Salad & cooking oils	23.5	24.2	25.4	25.8	24.0	24.2	25.2	25.6
Fresh fruits 11/	110.6	117.4	121.8	120.7	123.1	116.8	113.2	122.7
Canned fruit 12/	12.7	12.9	13.6	13.3	13.3	13.5	12.3	14.4
Dried fruit	2.9	2.7	3.1	3.3	3.2	3.6	3.1	3.2
Frozen fruit	3.3	3.6	3.9	3.8	4.6	4.3	3.9	4.7
Selected fruit juices 13/	66.9	65.0	70.0	64.7	67.0	59.6	63.8	59.6
Vegetables 11/								
Fresh	103.0	100.5	107.0	111.5	115.5	113.3	110.4	109.3
Canning	95.1	95.6	95.1	91.2	98.7	101.7	103.4	106.3
Freezing	19.6	18.5	19.3	21.1	20.7	20.5	21.8	20.8
Potatoes, all 11/	122.4	126.0	125.9	122.5	127.1	127.8	130.6	133.5
Sweetpotatoes 11/	5.4	4.4	4.4	4.1	4.1	4.6	4.0	4.3
Peanuts (shelled)	6.3	6.4	6.4	6.9	7.0	6.0	6.5	6.4
Tree nuts (shelled)	2.3	2.2	2.2	2.3	2.4	2.6	2.3	2.4
Flour & cereal products 14/	156.1	162.1	170.8	173.7	175.4	183.5	185.4	187.0
Wheat flour	124.7	125.7	130.0	130.0	129.6	135.8	136.5	138.3
Rice (milled basis)	9.0	11.6	14.0	14.3	15.2	16.2	16.8	16.8
Caloric sweeteners 15/	131.3	129.6	133.7	135.1	137.3	140.7	141.7	143.3
Coffee (green bean equiv.)	10.5	10.5	10.2	9.8	10.1	10.3	10.5	10.6
Cocoa (chocolate liquor equiv.)	3.7	3.8	3.8	3.8	4.0	4.3	4.6	4.6

1/ In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, & ending stocks. Calendar-year data except fresh citrus fruits, peanuts, tree nuts, & rice, which are on crop-year basis. 2/ Total may not add due to rounding. 3/ Boneless, trimmed weight. Chicken series revised to exclude amount of ready-to-cook chicken going to pet food as well as some water leakage that occurs when chicken is cut up before packaging. 4/ Excludes shipments to the U.S. territories. 5/ Natural equivalent of cheese & cheese & other dairy products. Includes miscellaneous cheese not shown separately. 6/ Includes Swiss, Brick, Munster, cream, Neuchâtel, Blue, Gorgonzola, Edam, & Gouda. 7/ Plain & flavored. 8/ Plain & flavored buttermilk. 9/ Heavy cream, light cream, half & half, & sour cream & dip. 10/ Includes condensed & evaporated milk & dry milk products. 11/ Farm weight. 12/ Excludes pineapples & berries. 13/ Single strength equivalent. 14/ Includes rye, corn, oat, & barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, & fuel. 15/ Dry weight equivalent. — not available. P = Preliminary.

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